



DS174

Dairy Business Analysis Project: Financial Summary for 1995-2001¹

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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 businesses using standardized accounting measures. The University of Georgia has been a collaborator since 1998. The DBAP website is <http://www.animal.ufl.edu/dbap>.

Financial data for the years 1995 through 2001 were collected from participating dairies and screened for completeness and validity. Each dairy then received a report detailing its financial results compared to the average results for the other participants and the dairies with the highest net farm income from operations per cwt.

This publication is a summary of the data collected for the years 1995 through 2001. Some results may be slightly different from the annual DBAP summaries published in EDIS because minor changes in the calculations have been made over the years. This publication is intended for general use by dairy farmers, the allied industry, and government, and educational professionals.

Data Collection and Accounting Methods

Dairy businesses in Florida, Georgia, and some in Alabama were asked to participate in DBAP. Participants were therefore not a random sample of all dairies in the three states.

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

The accounting methods follow the recommendations made by the Farm Financial Standards Council Farm Financial Standards Council. 1997. Financial Guidelines for Agricultural Producers. All revenues and expenses were accrual adjusted. Cash receipts and expenses were therefore adjusted for changes in inventory, prepaid expenses, depreciation, accounts payable, and receivable.

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Depreciation data were taken from tax records. Asset valuation was based on market values. Unpaid management was valued at \$50,000 per farm. Gain or loss on sale of capital assets resulted when depreciation did not completely account for the gain or loss in the value of the asset during the year.

The bottom line of each dairy business 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 business. It is the total income available for the owners salary, new investments, taxes, and paying off loan 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% for the business to be included in the summary results reported here.

Results

Financial data was collected from 263 dairy x year combinations between 1995 and 2001, but 234 of those were included in this summary. All dairies were located in Florida, Georgia, and Alabama. Data were collected from 20, 27, 44, 55, 26, 23, and 39 dairies in 1995 through 2001, respectively. The average herd size was 1,527, 1,375, 1,280, 808, 1,063, 1,079, and 977 cows with 15,689, 15,774, 16,586, 16,963, 17,973, 17,778, and 17,170 lbs. milk sold per cow for 1995 through 2001, respectively. Total revenue for the seven years were in chronological order \$16.98, \$20.24, \$18.03, \$19.40, \$19.07, \$18.16, and \$20.00. Corresponding total expenses were \$17.60, \$18.51, \$17.83, \$17.42, \$16.27, \$17.08, and \$17.75. Total revenue minus total expenses equals net farm income from operations, which averaged \$(0.63), \$1.73, \$0.20, \$1.98, \$2.79, \$ 1.07, and \$2.25 per cwt. for 1995 though 2001, respectively. Net farm income for 1995 through 2001

averaged \$0.26, \$2.19, \$1.27, \$2.07, \$2.91, \$1.10, and \$2.39, respectively.

Summary results are presented in Tables 1.1 through 5.5. Some definitions and calculation rules are as follows:

Asset turnover ratio = total revenues / average assets

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 = assets that can be converted to cash within one year without interrupting the business

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

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Net farm income = NFIFO + gain or loss 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 assets = (NFIFO + interest paid – unpaid management) / average assets

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

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

The results in tables 2.1 through 5.5 are sorted in three groups with approximately the same number of farms per group based on the sorting criteria.

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Table 1.1. DBAP 1995-2001 Summary – Average and standard deviation of business size and production efficiency by year.

Category		1995	1996	1997	1998	1999	2000	2001
Number of farms		20	27	44	55	26	23	39
Business Size								
Number of cows	<i>mean</i>	1,527	1,375	1,280	808	1,063	1,079	977
	<i>std¹</i>	2,420	1,683	2,127	759	880	899	980
Number of heifers	<i>mean</i>	822	734	724	424	589	615	477
	<i>std¹</i>	1,667	1,120	1,317	596	792	747	693
Milk sold (million lbs)	<i>mean</i>	24.22	21.75	21.31	14.26	19.85	20.59	17.55
	<i>std¹</i>	36.14	25.22	32.14	14.76	18.44	19.40	19.45
FTE workers	<i>mean</i>	29	26	23	16	21	20	19
	<i>std¹</i>	40	33	34	19	23	17	19
Acres of pasture + cultivated land	<i>mean</i>	1,245	859	817	388	515	463	437
	<i>std¹</i>	2,509	1,399	1,874	455	512	539	474
Production Efficiency	<i>mean</i>	15,689	15,774	16,586	16,963	17,973	17,778	17,170
Milk sold / cow (lbs)	<i>std¹</i>	3,420	2,973	3,228	3,489	3,101	3,702	2,837
Cows / FTE worker	<i>mean</i>	57.95	54.39	54.07	55.79	59.00	53.81	51.53
	<i>std¹</i>	29.65	25.92	18.83	21.14	23.54	19.03	18.84
Milk sold / FTE worker (million lbs)	<i>mean</i>	0.88	0.82	0.88	0.92	1.03	0.96	0.88
	<i>std¹</i>	0.41	0.29	0.28	0.31	0.35	0.37	0.35
Cull rate	<i>mean</i>	0.35	0.34	0.35	0.38	0.34	0.38	0.36
	<i>std¹</i>	0.16	0.12	0.15	0.12	0.09	0.11	0.13

¹Standard deviation.**Table 1.2.** DBAP 1995-2001 Summary – Average and standard deviation of revenues by year.

Category		1995	1996	1997	1998	1999	2000	2001
Number of farms		20	27	44	55	26	23	39
Revenues (per cwt)								
Milk sold (\$)	<i>mean</i>	15.26	18.39	16.68	18.35	17.80	16.69	18.24
	<i>std¹</i>	0.57	0.82	0.97	0.90	0.91	0.79	1.22
Raised, leased cow sales (\$)	<i>mean</i>	0.89	1.09	0.66	0.47	0.53	0.61	0.56
	<i>std¹</i>	0.93	1.31	0.74	0.70	0.59	0.79	0.78
Heifer sales (\$)	<i>mean</i>	0.16	0.26	0.19	0.14	0.20	0.40	0.29
	<i>std¹</i>	0.50	0.40	0.57	0.53	0.63	1.08	0.53
Gain on purchased livestock sales (\$)	<i>mean</i>	0.00	(0.08)	0.10	(0.12)	(0.19)	(0.04)	(0.08)
	<i>std¹</i>	0.00	0.51	0.96	0.77	0.54	0.63	0.99
Other revenues (\$)	<i>mean</i>	0.66	0.59	0.40	0.55	0.72	0.50	0.99
	<i>std¹</i>	0.87	0.78	1.11	0.78	0.92	0.62	1.05
Total revenues (\$)	<i>mean</i>	16.98	20.24	18.03	19.40	19.07	18.16	20.00
	<i>std¹</i>	1.27	1.73	1.81	1.35	1.53	1.76	2.26

¹Standard deviation.

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Table 1.3. DBAP 1995-2001 Summary – Average and standard deviation of costs by year.

Category		1995	1996	1997	1998	1999	2000	2001
Number of farms		20	27	44	55	26	23	39
Costs (per cwt)								
Personnel (\$)	<i>mean</i>	2.76	2.45	2.40	2.23	2.37	2.66	2.69
	<i>std¹</i>	0.68	0.69	0.95	0.92	0.78	0.87	1.04
Purchased feed (\$)	<i>mean</i>	7.61	8.80	8.41	7.69	7.04	6.94	7.32
	<i>std¹</i>	1.23	1.29	1.61	1.44	1.32	1.74	1.61
Crops (\$)	<i>mean</i>	0.24	0.31	0.28	0.32	0.31	0.27	0.48
	<i>std¹</i>	0.40	0.39	0.39	0.42	0.38	0.42	0.89
Machinery (\$)	<i>mean</i>	0.77	0.89	0.82	0.83	0.88	0.86	1.01
	<i>std¹</i>	0.31	0.58	0.52	0.45	0.53	0.53	0.52
Livestock (\$)	<i>mean</i>	2.00	2.25	2.31	1.56	1.53	1.69	1.64
	<i>std¹</i>	1.00	1.26	1.49	0.66	0.77	0.92	0.88
Milk marketing (\$)	<i>mean</i>	1.21	0.98	1.06	1.09	1.04	1.10	1.05
	<i>std¹</i>	0.33	0.26	0.31	0.38	0.40	0.36	0.37
Buildings and land (\$)	<i>mean</i>	0.45	0.50	0.53	0.65	0.61	0.63	0.64
	<i>std¹</i>	0.39	0.30	0.28	0.42	0.47	0.64	0.49
Interest (\$)	<i>mean</i>	0.69	0.75	0.69	0.70	0.55	0.65	0.61
	<i>std¹</i>	0.56	0.43	0.53	0.54	0.31	0.43	0.53
<i>Depreciation:</i>								
• Livestock (\$)	<i>mean</i>	0.00	0.00	0.07	0.87	0.70	0.88	0.67
	<i>std¹</i>	0.00	0.02	0.22	0.77	0.60	0.76	0.69
• Machinery (\$)	<i>mean</i>	0.48	0.50	0.35	0.44	0.37	0.44	0.50
	<i>std¹</i>	0.70	0.53	0.36	0.41	0.23	0.41	0.42
• Buildings (\$)	<i>mean</i>	0.53	0.43	0.15	0.20	0.13	0.22	0.24
	<i>std¹</i>	1.24	0.85	0.19	0.26	0.12	0.18	0.33
Other expenses (\$)	<i>mean</i>	0.85	0.65	0.76	0.84	0.74	0.74	0.90
	<i>std¹</i>	0.47	0.39	0.38	0.45	0.37	0.32	0.47
Total expenses (\$)	<i>mean</i>	17.60	18.51	17.83	17.42	16.27	17.08	17.75
	<i>std¹</i>	2.68	2.08	2.11	2.19	1.58	2.49	2.01
Net farm income from operations (\$)	<i>mean</i>	(0.63)	1.73	0.20	1.98	2.79	1.07	2.25
	<i>std¹</i>	2.34	2.45	2.21	1.94	1.75	2.07	1.85
Gain on sale of capital assets (\$)	<i>mean</i>	0.89	0.46	1.07	0.09	0.11	(0.04)	0.15
	<i>std¹</i>	1.74	1.47	5.16	0.43	0.46	0.49	0.43
Net farm income (\$)	<i>mean</i>	0.26	2.19	1.27	2.07	2.91	1.10	2.39
	<i>std¹</i>	1.67	2.54	4.59	1.99	1.73	2.04	1.92

¹Standard deviation.

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Table 1.4. DBAP 1995-2001 Summary – Average and standard deviation of financial performance by year.

Category		1995	1996	1997	1998	1999	2000	2001
Number of farms		20	27	44	55	26	23	39
Liquidity								
Current ratio	<i>mean</i>	2.08	2.34	8.20	159.12	12.97	2.02	2.34
	<i>std¹</i>	2.36	3.01	40.82	919.97	25.64	2.29	3.43
Working capital	<i>mean</i>	(258,913)	31,219	(91,439)	140,989	312,030	(8,319)	185,321
	<i>std¹</i>	1,287,444	706,000	546,903	400,112	555,198	632,552	536,348
Solvency								
Debt to asset ratio	<i>mean</i>	0.23	0.43	0.43	0.41	0.41	0.36	0.32
	<i>std¹</i>	0.22	0.27	0.34	0.29	0.27	0.20	0.21
Equity to asset ratio	<i>mean</i>	0.77	0.57	0.57	0.59	0.59	0.64	0.68
	<i>std¹</i>	0.22	0.27	0.34	0.29	0.27	0.20	0.21
Debt to equity ratio	<i>mean</i>	0.47	5.31	0.87	(9.46)	1.94	0.74	0.72
	<i>std¹</i>	0.64	18.98	5.56	79.54	4.04	0.64	1.18
Profitability								
Rate of return on assets	<i>mean</i>	(0.03)	0.12	0.03	0.12	0.15	0.07	0.09
	<i>std¹</i>	0.25	0.23	0.13	0.24	0.15	0.08	0.09
Rate of return on equity	<i>mean</i>	(0.08)	0.09	(0.10)	(1.76)	(1.24)	0.07	0.11
	<i>std¹</i>	0.27	1.57	1.32	14.84	7.56	0.14	0.19
Operating profit margin ratio	<i>mean</i>	(0.05)	0.09	(0.02)	0.10	0.15	0.06	0.09
	<i>std¹</i>	0.18	0.11	0.18	0.11	0.09	0.13	0.10
Financial efficiency								
Asset turnover rate	<i>mean</i>	1.09	1.00	0.99	1.14	1.03	0.89	0.90
	<i>std¹</i>	0.61	0.59	0.61	1.35	0.44	0.46	0.42
Operating expense ratio	<i>mean</i>	0.94	0.83	0.92	0.78	0.76	0.82	0.79
	<i>std¹</i>	0.10	0.09	0.11	0.10	0.08	0.10	0.10
Depreciation expense ratio	<i>mean</i>	0.06	0.05	0.03	0.08	0.06	0.08	0.07
	<i>std¹</i>	0.10	0.06	0.03	0.04	0.03	0.04	0.04
Interest expense ratio	<i>mean</i>	0.04	0.04	0.04	0.04	0.03	0.04	0.03
	<i>std¹</i>	0.03	0.02	0.03	0.03	0.02	0.02	0.03
Net farm income ratio	<i>mean</i>	(0.04)	0.08	0.01	0.10	0.14	0.06	0.11
	<i>std¹</i>	0.13	0.11	0.12	0.10	0.09	0.12	0.09
Repayment capacity								
Cash flow coverage ratio	<i>mean</i>	0.42	1.23	10.91	132.24	10.48	4.24	3.08
	<i>std¹</i>	1.14	2.92	69.86	820.96	20.75	8.71	6.73
Term debt coverage ratio ²	<i>mean</i>	0.00	0.00	18.41	19.88	32.36	9.93	10.66
	<i>std¹</i>	0.00	0.00	68.81	64.46	41.70	38.44	33.57
Capital replacement margin ³	<i>mean</i>	(153,399)	291,830	(121,642)	204,627	416,446	145,544	386,201
	<i>std¹</i>	862,181	491,115	543,483	638,405	727,686	578,631	635,232

¹Standard deviation.²Term debt and capital lease coverage ratio.³Capital replacement and term debt repayment margin.

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Table 1.5. DBAP 1995-2001 Summary – Average and standard deviations of balance sheets by year.

Category		1995	1996	1997	1998	1999	2000	2001
Number of farms		20	27	44	55	26	23	39
Balance sheet (January 1)								
Current assets / cow (\$)	<i>mean</i>	280	287	306	322	548	459	451
	<i>std¹</i>	129	194	216	269	309	354	376
Total assets / cow (\$)	<i>mean</i>	3,352	3,902	3,788	3,914	3,910	4,555	4,535
	<i>std¹</i>	2,090	1,743	2,125	2,374	1,921	2,637	2,267
Current liabilities/cow (\$)	<i>mean</i>	330	482	373	616	551	541	376
	<i>std¹</i>	413	422	295	697	407	479	339
Total liabilities / cow	<i>mean</i>	961	1,510	1,545	1,523	1,459	1,383	1,305
	<i>std¹</i>	955	886	1,395	1,049	946	790	833
Equity / cow (\$)	<i>mean</i>	2,392	2,392	2,243	2,391	2,451	3,172	3,230
	<i>std¹</i>	1,482	1,460	2,199	2,351	2,199	2,877	2,315
Balance sheet (December 31)								
Current assets / cow (\$)	<i>mean</i>	261	388	278	464	633	418	541
	<i>std¹</i>	129	219	219	304	341	252	421
Total assets / cow (\$)	<i>mean</i>	3,382	3,892	3,891	4,072	4,078	4,552	4,725
	<i>std¹</i>	2,084	1,612	1,978	2,413	1,911	2,376	2,298
Current liabilities/cow (\$)	<i>mean</i>	282	304	313	353	291	419	394
	<i>std¹</i>	398	393	318	310	335	317	285
Total liabilities / cow (\$)	<i>mean</i>	1,050	1,540	1,554	1,460	1,408	1,431	1,301
	<i>std¹</i>	1,059	893	1,427	990	771	828	869
Equity / cow (\$)	<i>mean</i>	2,331	2,352	2,338	2,613	2,670	3,121	3,425
	<i>std¹</i>	1,305	1,456	2,066	2,444	2,207	2,379	2,358

¹Standard deviation.

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Table 2.1. DBAP 1995-2001 Summary - Business size and production efficiency by average number of cows.

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Business Size							
Number of cows							
• Lowest third	288	383	222	219	356	251	201
• Middle third	736	796	651	568	829	877	621
• Highest third	3,820	2,946	3,059	1,649	2,062	2,167	2,108
Number of heifers							
• Lowest third	126	170	107	109	238	149	118
• Middle third	355	505	358	320	443	432	309
• Highest third	2,141	1,526	1,758	850	1,123	1,316	1,002
Milk sold (million lbs)							
• Lowest third	3.67	6.33	3.41	3.28	6.31	3.51	3.26
• Middle third	12.42	13.00	11.33	10.27	15.33	17.21	11.04
• Highest third	60.51	45.90	50.62	29.46	39.04	42.02	38.35
FTE workers							
• Lowest third	5	8	6	5	7	5	5
• Middle third	16	15	13	11	18	18	13
• Highest third	71	56	52	32	40	38	37
Acres of pasture + cultivated land							
• Lowest third	206	179	233	197	345	196	180
• Middle third	581	559	426	316	482	305	304
• Highest third	3,169	1,838	1,849	654	728	933	827
Production Efficiency							
Milk sold / cow (lbs)							
• Lowest third	12,598	15,573	14,916	15,091	17,503	14,025	16,144
• Middle third	17,477	16,236	17,332	18,132	18,118	19,852	17,840
• Highest third	16,394	15,513	17,404	17,602	18,262	18,865	17,525
Cows / FTE worker							
• Lowest third	75.54	43.61	45.32	50.02	57.43	49.31	41.29
• Middle third	48.01	50.73	52.91	54.70	54.72	53.31	50.81
• Highest third	53.61	67.23	64.16	62.71	65.90	58.94	62.48
Milk sold / FTE worker (million lbs)							
• Lowest third	0.99	0.64	0.67	0.73	0.98	0.69	0.66
• Middle third	0.81	0.83	0.90	0.97	0.96	1.04	0.90
• Highest third	0.85	0.97	1.07	1.06	1.16	1.12	1.09
Cull rate							
• Lowest third	0.42	0.33	0.29	0.36	0.31	0.42	0.41
• Middle third	0.32	0.39	0.37	0.41	0.35	0.35	0.32
• Highest third	0.33	0.29	0.39	0.38	0.36	0.38	0.34

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Table 2.2. DBAP 1995-2001 Summary - Revenues by average number of cows.

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Revenues (per cwt)							
Milk sold (\$)							
• Lowest third	15.52	18.16	16.07	18.16	17.29	16.78	17.71
• Middle third	14.90	18.14	16.76	17.97	17.79	16.32	18.15
• Highest third	15.49	18.86	17.21	18.94	18.31	17.07	18.87
Raised, leased cow sales (\$)							
• Lowest third	1.10	1.03	0.78	0.43	0.69	1.16	0.50
• Middle third	0.86	1.25	0.48	0.42	0.53	0.36	0.83
• Highest third	0.73	0.98	0.75	0.57	0.36	0.39	0.36
Heifer sales (\$)							
• Lowest third	0.15	0.31	0.25	0.26	0.11	0.66	0.24
• Middle third	0.17	0.20	0.28	0.09	0.06	0.16	0.22
• Highest third	0.17	0.27	0.04	0.09	0.47	0.45	0.41
Gain on purchased livestock sales (\$)							
• Lowest third	0.00	(0.25)	0.37	0.10	0.14	(0.04)	0.23
• Middle third	0.00	0.00	(0.09)	(0.15)	(0.23)	(0.04)	(0.28)
• Highest third	0.00	0.00	0.04	(0.29)	(0.45)	(0.06)	(0.17)
Other revenues (\$)							
• Lowest third	0.84	0.74	0.76	0.74	0.94	0.94	1.66
• Middle third	0.87	0.77	0.09	0.57	0.52	0.26	0.74
• Highest third	0.19	0.27	0.39	0.32	0.76	0.38	0.54
Total revenues (\$)							
• Lowest third	17.61	19.99	18.23	19.69	19.17	19.50	20.34
• Middle third	16.80	20.35	17.52	18.90	18.67	17.06	19.66
• Highest third	16.58	20.39	18.42	19.63	19.45	18.23	20.01

Table 2.3. DBAP 1995-2001 Summary - Costs by average number of cows.

Category	1995	1996	1997	1998	1998	2000	2001
Number of farms	20	27	44	55	26	23	39
Costs (per cwt)							
Personnel (\$)							
• Lowest third	2.56	2.31	2.34	1.95	1.93	2.53	2.39
• Middle third	2.85	2.46	2.46	2.26	2.65	2.81	2.87
• Highest third	2.85	2.59	2.41	2.47	2.46	2.59	2.82
Purchased feed (\$)							
• Lowest third	7.88	9.52	8.52	8.03	7.08	7.81	7.31
• Middle third	7.60	8.75	8.06	7.51	6.89	6.49	7.47
• Highest third	7.36	8.15	8.70	7.53	7.20	6.66	7.19
Crops (\$)							
• Lowest third	0.16	0.25	0.30	0.32	0.35	0.42	0.90
• Middle third	0.33	0.36	0.28	0.27	0.39	0.20	0.32
• Highest third	0.19	0.34	0.26	0.37	0.16	0.22	0.21
Machinery (\$)							
• Lowest third	0.73	0.83	0.94	0.85	0.93	1.07	1.27
• Middle third	0.84	1.19	0.82	0.82	0.95	0.74	0.80
• Highest third	0.73	0.63	0.70	0.84	0.74	0.81	0.94
Livestock (\$)							
• Lowest third	1.83	2.11	2.35	1.39	1.23	1.67	1.48
• Middle third	1.82	2.08	2.00	1.59	1.98	1.75	1.69
• Highest third	2.39	2.56	2.62	1.69	1.27	1.64	1.75
Milk marketing (\$)							
• Lowest third	1.35	0.99	1.14	1.24	0.97	1.31	1.06
• Middle third	1.15	0.95	1.06	0.93	1.06	0.96	1.07
• Highest third	1.15	1.00	1.00	1.11	1.10	1.07	1.01
Buildings and land (\$)							
• Lowest third	0.49	0.40	0.62	0.66	0.93	0.98	0.59
• Middle third	0.50	0.51	0.49	0.61	0.41	0.44	0.71
• Highest third	0.36	0.59	0.49	0.69	0.56	0.53	0.60
Interest (\$)							
• Lowest third	0.67	0.82	0.82	1.01	0.36	0.80	0.81
• Middle third	0.90	0.71	0.65	0.55	0.62	0.54	0.56
• Highest third	0.43	0.72	0.59	0.55	0.64	0.64	0.45
Depreciation:							
- Livestock (\$)							
• Lowest third	0.00	0.01	0.04	1.08	0.67	0.94	0.66
• Middle third	0.00	0.00	0.13	0.69	0.50	0.69	0.54
• Highest third	0.00	0.00	0.04	0.85	0.98	1.04	0.82
- Machinery (\$)							
• Lowest third	0.78	0.54	0.39	0.64	0.37	0.60	0.64
• Middle third	0.43	0.58	0.36	0.35	0.38	0.46	0.45
• Highest third	0.25	0.39	0.31	0.35	0.35	0.27	0.41

Table 2.3. DBAP 1995-2001 Summary - Costs by average number of cows (continued).

Category	1995	1996	1997	1998	1998	2000	2001
Number of farms	20	27	44	55	26	23	39
- Buildings (\$)							
• Lowest third	1.07	0.61	0.14	0.18	0.11	0.28	0.33
• Middle third	0.33	0.32	0.10	0.27	0.10	0.16	0.19
• Highest third	0.27	0.35	0.22	0.16	0.20	0.21	0.19
Other expenses (\$)							
• Lowest third	1.02	0.58	0.98	1.10	0.97	0.69	1.03
• Middle third	0.83	0.72	0.72	0.74	0.56	0.69	0.87
• Highest third	0.71	0.64	0.58	0.69	0.72	0.86	0.86
Total expenses (\$)							
• Lowest third	18.54	18.97	18.56	18.44	15.90	19.10	18.47
• Middle third	17.59	18.62	17.12	16.59	16.48	15.93	17.54
• Highest third	16.68	17.95	17.92	17.28	16.37	16.54	17.25
Net farm income from operations (\$)							
• Lowest third	(0.94)	1.02	(0.33)	1.25	3.27	0.39	1.86
• Middle third	(0.79)	1.73	0.39	2.31	2.19	1.12	2.11
• Highest third	(0.10)	2.44	0.50	2.35	3.08	1.69	2.76
Gain on sale of capital assets (\$)							
• Lowest third	1.36	0.48	2.73	0.09	0.04	0.23	0.02
• Middle third	0.63	0.29	0.32	0.08	0.10	(0.21)	0.19
• Highest third	0.75	0.60	0.27	0.10	0.19	(0.09)	0.23
Net farm income (\$)							
• Lowest third	0.43	1.50	2.40	1.35	3.31	0.69	1.88
• Middle third	(0.16)	2.02	0.71	2.39	2.29	0.99	2.31
• Highest third	0.66	3.04	0.77	2.45	3.27	1.64	2.99

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Table 2.4. DBAP 1995-2001 Summary - Financial performance by average number of cows.

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Liquidity							
Current ratio							
• Lowest third	0.59	2.05	1.03	0.94	14.61	1.20	2.70
• Middle third	2.77	1.72	24.19	525.19	12.61	2.79	2.19
• Highest third	2.00	3.00	2.29	3.45	12.18	1.87	1.59
Working capital							
• Lowest third	(18,801)	75,549	(14,434)	(14,981)	162,878	(42,456)	31,707
• Middle third	94,364	51,275	(21,152)	109,797	227,389	59,076	55,775
• Highest third	(970,060)	(33,165)	(248,772)	329,884	566,984	(60,834)	468,480
Solvency							
Debt to asset ratio							
• Lowest third	0.33	0.38	0.49	0.49	0.30	0.36	0.32
• Middle third	0.16	0.46	0.36	0.37	0.41	0.33	0.34
• Highest third	0.23	0.45	0.46	0.36	0.52	0.40	0.29
Equity to asset ratio							
• Lowest third	0.67	0.62	0.51	0.51	0.70	0.64	0.68
• Middle third	0.84	0.54	0.64	0.63	0.59	0.67	0.66
• Highest third	0.77	0.55	0.54	0.64	0.48	0.60	0.71
Debt to equity ratio							
• Lowest third	0.89	0.67	0.75	1.41	1.64	0.72	0.67
• Middle third	0.24	(0.41)	1.49	1.44	2.64	0.65	1.00
• Highest third	0.34	15.68	0.29	(31.84)	1.37	0.89	0.49
Profitability							
Rate of return on assets							
• Lowest third	(0.18)	0.04	(0.03)	0.02	0.11	0.03	0.03
• Middle third	0.03	0.17	0.08	0.12	0.12	0.06	0.10
• Highest third	0.02	0.15	0.05	0.22	0.24	0.11	0.15
Rate of return on equity							
• Lowest third	(0.22)	0.01	(0.09)	(6.10)	(4.68)	0.02	0.00
• Middle third	(0.03)	0.72	(0.24)	(0.09)	0.06	0.06	0.10
• Highest third	(0.00)	(0.45)	0.07	0.81	0.56	0.12	0.22
Operating profit margin ratio							
• Lowest third	(0.15)	0.03	(0.13)	0.02	0.14	(0.04)	0.02
• Middle third	(0.02)	0.09	0.03	0.12	0.12	0.08	0.11
• Highest third	0.01	0.15	0.05	0.14	0.18	0.12	0.15
Financial efficiency							
Asset turnover rate							
• Lowest third	0.99	0.94	0.87	0.87	0.81	0.86	0.67
• Middle third	1.16	1.00	1.14	1.03	1.05	0.90	0.95
• Highest third	1.11	1.06	0.96	1.51	1.22	0.92	1.06
Operating expense ratio							
• Lowest third	0.92	0.85	0.95	0.79	0.75	0.85	0.79
• Middle third	0.95	0.85	0.91	0.78	0.80	0.83	0.81
• Highest third	0.95	0.81	0.91	0.78	0.73	0.79	0.77

Table 2.4. DBAP 1995-2001 Summary - Financial performance by average number of cows (continued).

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Depreciation expense ratio							
• Lowest third	0.10	0.06	0.03	0.10	0.06	0.10	0.08
• Middle third	0.04	0.04	0.03	0.07	0.05	0.08	0.06
• Highest third	0.03	0.04	0.03	0.07	0.08	0.08	0.07
Interest expense ratio							
• Lowest third	0.04	0.04	0.05	0.05	0.02	0.04	0.04
• Middle third	0.05	0.03	0.03	0.03	0.03	0.03	0.03
• Highest third	0.03	0.04	0.03	0.03	0.03	0.04	0.02
Net farm income ratio							
• Lowest third	(0.05)	0.05	(0.03)	0.06	0.17	0.01	0.09
• Middle third	(0.05)	0.07	0.02	0.12	0.11	0.07	0.10
• Highest third	(0.01)	0.12	0.02	0.12	0.16	0.09	0.13
Repayment capacity							
Cash flow coverage ratio							
• Lowest third	0.22	1.37	(0.68)	1.32	10.11	1.28	1.72
• Middle third	0.52	0.21	29.31	378.82	9.41	4.21	5.36
• Highest third	0.49	2.11	1.47	2.86	12.20	7.25	1.46
Term debt coverage ratio ¹							
• Lowest third	0.00	0.00	0.46	32.32	2.87	0.85	2.46
• Middle third	0.00	0.00	1.76	3.41	61.85	2.48	5.19
• Highest third	0.00	0.00	93.18	17.58	0.00	28.59	18.60
Capital replacement margin ²							
• Lowest third	16,364	52,484	(61,337)	(23,346)	125,470	(19,886)	20,007
• Middle third	13,162	130,659	(76,926)	60,441	254,176	(9,977)	216,808
• Highest third	(545,244)	692,346	(233,052)	584,796	910,258	485,276	921,788

¹Term debt and capital lease coverage ratio.²Capital replacement and term debt repayment margin.

Table 2.5. DBAP 1995-2001 Summary - Balance sheet by average number of cows.

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Balance sheet (January 1)							
Current assets / cow (\$)							
• Lowest third	171	278	240	275	562	219	456
• Middle third	355	304	358	315	496	478	401
• Highest third	290	278	312	377	599	676	497
Total assets / cow (\$)							
• Lowest third	2,970	4,072	4,077	4,477	4,792	5,414	5,904
• Middle third	3,706	4,447	3,808	3,701	3,923	4,312	4,152
• Highest third	3,263	3,187	3,475	3,576	3,013	4,009	3,548
Current liabilities / cow (\$)							
• Lowest third	322	376	316	682	516	334	406
• Middle third	214	519	401	613	517	512	280
• Highest third	491	551	400	555	626	787	443
Total liabilities / cow (\$)							
• Lowest third	1,290	1,598	1,946	1,759	1,372	1,384	1,552
• Middle third	773	1,584	1,236	1,471	1,325	1,184	1,170
• Highest third	881	1,349	1,496	1,341	1,714	1,639	1,193
Equity / cow (\$)							
• Lowest third	1,680	2,474	2,131	2,718	3,419	4,030	4,351
• Middle third	2,932	2,863	2,571	2,230	2,598	3,129	2,983
• Highest third	2,383	1,838	1,979	2,234	1,299	2,370	2,356
Balance sheet (December 31)							
Current assets / cow (\$)							
• Lowest third	169	323	221	337	644	230	539
• Middle third	345	469	330	500	580	434	445
• Highest third	242	373	275	551	687	586	637
Total assets / cow (\$)							
• Lowest third	3,035	3,879	4,191	4,612	4,866	5,560	6,198
• Middle third	3,677	4,508	3,947	3,902	4,031	4,256	4,264
• Highest third	3,335	3,289	3,528	3,713	3,348	3,925	3,715
Current liabilities / cow (\$)							
• Lowest third	202	177	287	435	202	360	378
• Middle third	239	432	327	291	307	355	330
• Highest third	419	303	322	336	360	560	475
Total liabilities / cow (\$)							
• Lowest third	1,326	1,515	1,995	1,775	1,079	1,623	1,570
• Middle third	906	1,764	1,188	1,319	1,444	1,250	1,216
• Highest third	967	1,342	1,530	1,293	1,692	1,472	1,117
Equity / cow (\$)							
• Lowest third	1,708	2,364	2,196	2,837	3,787	3,937	4,628
• Middle third	2,771	2,744	2,759	2,582	2,588	3,006	3,048
• Highest third	2,368	1,947	1,998	2,420	1,656	2,452	2,598

Table 3.1. DBAP 1995-2001 Summary - Business size and production efficiency by milk per cow (lbs/year).

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Business Size							
Number of cows							
• Lowest third	673	1,817	1,887	585	912	444	625
• Middle third	2,413	870	838	871	659	1,273	920
• Highest third	1,199	1,438	1,179	964	1,718	1,465	1,385
Number of heifers							
• Lowest third	326	724	960	195	352	315	271
• Middle third	1,309	571	466	352	299	569	451
• Highest third	669	906	783	730	1,189	975	708
Milk sold (million lbs)							
• Lowest third	8.95	24.38	26.66	8.06	13.43	6.38	9.17
• Middle third	35.75	13.21	14.14	14.57	11.79	22.29	15.47
• Highest third	24.13	27.65	24.16	20.14	36.35	32.63	28.01
FTE workers							
• Lowest third	10	28	29	9	14	10	12
• Middle third	41	18	17	15	13	21	16
• Highest third	32	32	25	23	39	30	27
Acres of pasture + cultivated land							
• Lowest third	504	1,333	1,485	380	693	360	372
• Middle third	2,473	821	685	404	403	507	507
• Highest third	348	422	301	378	478	510	433
Production Efficiency							
Milk sold / cow (lbs)							
• Lowest third	12,291	12,864	13,112	13,225	14,522	13,778	14,358
• Middle third	15,288	15,318	16,679	16,712	17,826	17,554	16,897
• Highest third	19,620	19,141	19,954	20,968	21,608	22,068	20,254
Cows / FTE worker							
• Lowest third	66.38	72.08	62.76	63.16	71.39	48.70	46.13
• Middle third	63.78	47.66	51.33	59.40	58.64	63.24	54.67
• Highest third	41.74	44.28	48.52	44.61	47.04	46.79	53.79
Milk sold / FTE worker (million lbs)							
• Lowest third	0.84	0.91	0.84	0.83	1.03	0.67	0.65
• Middle third	0.97	0.73	0.85	0.99	1.04	1.11	0.92
• Highest third	0.80	0.84	0.96	0.93	1.02	1.05	1.07
Cull rate							
• Lowest third	0.42	0.32	0.35	0.36	0.31	0.39	0.34
• Middle third	0.29	0.38	0.39	0.40	0.37	0.40	0.41
• Highest third	0.37	0.31	0.31	0.38	0.33	0.34	0.33

Table 3.2. DBAP 1995-2001 Summary - Revenues by milk per cow (lbs/year).

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Revenues (per cwt)							
Milk sold (\$)							
• Lowest third	15.49	18.79	16.81	18.68	18.11	16.90	18.18
• Middle third	15.35	18.00	16.65	18.41	17.31	16.83	18.19
• Highest third	14.93	18.36	16.60	17.96	18.09	16.30	18.35
Raised, leased cow sales (\$)							
• Lowest third	0.86	1.53	0.40	0.54	0.43	1.15	0.38
• Middle third	1.03	0.69	0.92	0.36	0.41	0.34	0.78
• Highest third	0.74	1.04	0.62	0.53	0.77	0.43	0.53
Heifer sales (\$)							
• Lowest third	0.54	0.26	0.33	0.20	0.19	0.32	0.48
• Middle third	(0.15)	0.37	0.18	0.13	0.24	0.85	0.18
• Highest third	0.20	0.14	0.07	0.10	0.17	(0.11)	0.21
Gain on purchased livestock sales (\$)							
• Lowest third	0.00	(0.29)	0.41	(0.01)	(0.27)	(0.28)	(0.09)
• Middle third	0.00	0.04	(0.10)	(0.28)	(0.12)	0.21	(0.10)
• Highest third	0.00	0.00	0.00	(0.04)	(0.18)	(0.14)	(0.04)
Other revenues (\$)							
• Lowest third	0.33	0.63	0.22	0.54	0.37	0.73	1.59
• Middle third	1.05	0.84	0.77	0.66	1.09	0.35	0.64
• Highest third	0.47	0.31	0.15	0.43	0.61	0.47	0.71
Total revenues (\$)							
• Lowest third	17.22	20.93	18.18	19.95	18.83	18.82	20.54
• Middle third	17.28	19.94	18.42	19.27	18.93	18.58	19.69
• Highest third	16.34	19.86	17.44	18.97	19.47	16.95	19.76

Table 3.3. DBAP 1995-2001 Summary - Costs by milk per cow (lbs/year).

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Costs (per cwt)							
Personnel (\$)							
• Lowest third	2.16	2.18	2.02	2.01	2.20	2.49	2.63
• Middle third	3.04	2.62	2.66	2.19	2.36	2.83	2.81
• Highest third	2.99	2.57	2.50	2.48	2.54	2.60	2.64
Purchased feed (\$)							
• Lowest third	7.88	9.00	8.78	8.01	7.49	8.04	7.58
• Middle third	7.28	8.54	7.98	7.52	6.56	6.79	7.22
• Highest third	7.79	8.87	8.52	7.55	7.20	6.04	7.17
Crops (\$)							
• Lowest third	0.19	0.30	0.15	0.19	0.33	0.42	0.86
• Middle third	0.42	0.48	0.48	0.39	0.35	0.16	0.25
• Highest third	0.03	0.16	0.18	0.36	0.24	0.27	0.32
Machinery (\$)							
• Lowest third	0.64	0.71	0.58	0.74	0.84	1.08	1.22
• Middle third	0.83	0.98	1.07	0.87	0.96	0.66	0.97
• Highest third	0.83	0.98	0.76	0.90	0.81	0.91	0.83
Livestock (\$)							
• Lowest third	2.16	2.51	2.43	1.24	1.13	1.39	1.53
• Middle third	1.91	2.18	2.48	1.67	1.79	1.94	1.80
• Highest third	1.94	2.07	1.98	1.76	1.61	1.67	1.59
Milk marketing (\$)							
• Lowest third	1.33	0.96	1.09	1.14	1.10	1.27	0.92
• Middle third	1.25	1.07	1.03	1.07	1.05	1.04	1.15
• Highest third	1.04	0.92	1.07	1.06	0.97	1.01	1.07
Buildings and land (\$)							
• Lowest third	0.56	0.66	0.57	0.67	0.77	0.93	0.62
• Middle third	0.42	0.37	0.55	0.71	0.73	0.60	0.72
• Highest third	0.39	0.47	0.47	0.56	0.31	0.38	0.56
Interest (\$)							
• Lowest third	0.50	0.85	0.92	0.93	0.77	0.86	0.81
• Middle third	0.81	0.87	0.67	0.53	0.42	0.55	0.54
• Highest third	0.73	0.52	0.47	0.64	0.48	0.55	0.47
Depreciation:							
- Livestock (\$)							
• Lowest third	0.00	0.00	0.13	1.44	0.99	0.66	0.68
• Middle third	0.00	0.01	0.09	0.72	0.62	1.42	0.73
• Highest third	0.00	0.00	0.00	0.45	0.50	0.39	0.61
- Machinery (\$)							
• Lowest third	0.70	0.46	0.39	0.53	0.30	0.61	0.58
• Middle third	0.43	0.65	0.38	0.33	0.37	0.25	0.39
• Highest third	0.32	0.39	0.28	0.48	0.42	0.52	0.54

Table 3.3. DBAP 1995-2001 Summary - Costs by milk per cow (lbs/year) (continued).

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
- Buildings (\$)							
• Lowest third	1.09	0.63	0.19	0.23	0.11	0.32	0.29
• Middle third	0.17	0.28	0.13	0.17	0.11	0.13	0.13
• Highest third	0.46	0.38	0.14	0.22	0.19	0.21	0.30
Other expenses (\$)							
• Lowest third	0.88	0.58	0.87	0.89	0.83	0.71	1.08
• Middle third	0.97	0.77	0.71	0.80	0.66	0.69	0.79
• Highest third	0.67	0.58	0.70	0.83	0.74	0.86	0.86
Total expenses (\$)							
• Lowest third	18.09	18.83	18.13	18.03	16.86	18.78	18.80
• Middle third	17.54	18.82	18.23	16.98	16.00	17.06	17.50
• Highest third	17.20	17.90	17.08	17.28	16.02	15.41	16.96
Net farm income from operations (\$)							
• Lowest third	(0.88)	2.10	0.04	1.92	1.98	0.04	1.74
• Middle third	(0.26)	1.12	0.19	2.29	2.93	1.52	2.20
• Highest third	(0.86)	1.96	0.36	1.69	3.45	1.53	2.80
Gain on sale of capital assets (\$)							
• Lowest third	1.41	0.73	0.32	0.12	(0.02)	0.27	0.25
• Middle third	0.54	0.30	2.53	0.03	0.11	(0.04)	0.05
• Highest third	0.83	0.34	0.16	0.12	0.24	(0.35)	0.14
Net farm income (\$)							
• Lowest third	0.53	2.84	0.36	2.05	1.95	0.32	1.98
• Middle third	0.28	1.43	2.72	2.32	3.04	1.63	2.25
• Highest third	(0.03)	2.29	0.51	1.82	3.69	1.20	2.94

Table 3.4. DBAP 1995-2001 Summary - Financial performance by milk per cow (lbs/year).

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Liquidity							
Current ratio							
• Lowest third	0.49	4.22	22.80	3.06	13.35	1.29	2.33
• Middle third	3.26	1.15	1.54	1.94	13.78	2.19	1.65
• Highest third	2.10	1.39	1.37	524.51	11.50	2.55	2.50
Working capital							
• Lowest third	(79,022)	(90,301)	(239,496)	123,509	128,229	(27,969)	(99,858)
• Middle third	(495,024)	83,179	5,479	123,215	299,144	(23,594)	204,959
• Highest third	(123,989)	100,780	(54,146)	177,230	511,939	30,969	450,862
Solvency							
Debt to asset ratio							
• Lowest third	0.37	0.57	0.63	0.50	0.60	0.35	0.32
• Middle third	0.15	0.42	0.33	0.36	0.30	0.36	0.28
• Highest third	0.21	0.30	0.34	0.37	0.36	0.37	0.34
Equity to asset ratio							
• Lowest third	0.63	0.43	0.37	0.50	0.40	0.65	0.68
• Middle third	0.85	0.58	0.67	0.64	0.70	0.64	0.72
• Highest third	0.79	0.70	0.66	0.63	0.64	0.63	0.66
Debt to equity ratio							
• Lowest third	0.97	13.38	(0.77)	2.75	2.65	0.67	0.63
• Middle third	0.21	2.09	0.60	(31.03)	2.24	0.79	0.90
• Highest third	0.30	0.47	2.83	1.09	0.86	0.74	0.64
Profitability							
Rate of return on assets							
• Lowest third	(0.17)	0.21	0.02	0.08	0.11	0.01	0.04
• Middle third	0.05	0.06	0.04	0.19	0.16	0.09	0.09
• Highest third	0.00	0.10	0.04	0.09	0.19	0.10	0.14
Rate of return on equity							
• Lowest third	(0.20)	0.18	0.25	(5.42)	(4.67)	(0.03)	0.01
• Middle third	(0.02)	(0.01)	0.03	0.20	0.12	0.10	0.11
• Highest third	(0.04)	0.11	(0.59)	(0.18)	0.47	0.13	0.20
Operating profit margin ratio							
• Lowest third	(0.14)	0.09	(0.07)	0.08	0.11	(0.04)	0.05
• Middle third	0.00	0.07	0.01	0.12	0.14	0.09	0.09
• Highest third	(0.03)	0.11	0.01	0.09	0.19	0.11	0.14
Financial efficiency							
Asset turnover rate							
• Lowest third	0.93	1.44	1.01	0.96	0.94	0.61	0.68
• Middle third	1.29	0.71	0.82	1.40	1.12	1.11	0.97
• Highest third	1.00	0.86	1.17	1.03	1.00	0.89	1.05
Operating expense ratio							
• Lowest third	0.93	0.81	0.92	0.75	0.78	0.87	0.80
• Middle third	0.93	0.85	0.93	0.79	0.77	0.79	0.80
• Highest third	0.96	0.84	0.93	0.82	0.74	0.81	0.77

Table 3.4. DBAP 1995-2001 Summary - Financial performance by milk per cow (lbs/year) (continued).

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Depreciation expense ratio							
• Lowest third	0.09	0.05	0.04	0.11	0.08	0.09	0.07
• Middle third	0.03	0.05	0.03	0.06	0.06	0.10	0.06
• Highest third	0.05	0.04	0.02	0.06	0.06	0.07	0.07
Interest expense ratio							
• Lowest third	0.03	0.04	0.05	0.05	0.04	0.05	0.04
• Middle third	0.05	0.04	0.04	0.03	0.02	0.03	0.03
• Highest third	0.05	0.03	0.03	0.03	0.02	0.03	0.02
Net farm income ratio							
• Lowest third	(0.05)	0.09	(0.00)	0.10	0.10	(0.00)	0.08
• Middle third	(0.01)	0.06	0.00	0.12	0.15	0.08	0.11
• Highest third	(0.05)	0.10	0.02	0.09	0.18	0.09	0.14
Repayment capacity							
Cash flow coverage ratio							
• Lowest third	0.24	2.99	33.04	3.92	9.62	1.60	1.77
• Middle third	0.06	0.47	0.13	1.25	8.53	6.97	1.50
• Highest third	1.09	0.23	1.09	398.81	13.79	3.38	5.27
Term debt coverage ratio ¹							
• Lowest third	0.00	0.00	0.85	2.43	0.00	0.49	16.97
• Middle third	0.00	0.00	56.20	48.45	32.36	23.81	1.96
• Highest third	0.00	0.00	1.56	1.52	0.00	1.52	7.31
Capital replacement margin ²							
• Lowest third	9,485	130,365	(374,947)	105,011	140,928	(52,825)	172,893
• Middle third	(445,920)	214,421	45,869	320,857	312,810	357,616	449,668
• Highest third	73,743	530,704	(59,779)	181,555	821,508	(71,250)	536,042

¹Term debt and capital lease coverage ratio.²Capital replacement and term debt repayment margin.

Table 3.5. DBAP 1995-2001 Summary - Balance sheet by milk per cow (lbs/year).

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Balance sheet (January 1)							
Current assets / cow (\$)							
• Lowest third	206	170	202	247	448	257	291
• Middle third	260	338	389	303	559	411	382
• Highest third	382	352	315	418	634	724	681
Total assets / cow (\$)							
• Lowest third	3,014	2,440	3,517	3,313	3,197	5,797	5,113
• Middle third	2,863	4,566	4,325	4,180	3,955	3,384	4,178
• Highest third	4,342	4,701	3,444	4,234	4,568	4,820	4,313
Current liabilities / cow (\$)							
• Lowest third	474	346	386	496	489	341	337
• Middle third	168	518	403	623	532	585	247
• Highest third	402	582	327	730	636	685	545
Total liabilities / cow (\$)							
• Lowest third	1,458	1,224	2,104	1,566	2,035	1,518	1,400
• Middle third	555	1,889	1,464	1,366	832	1,061	1,130
• Highest third	1,004	1,418	1,079	1,646	1,667	1,663	1,384
Equity / cow (\$)							
• Lowest third	1,557	1,216	1,413	1,747	1,162	4,279	3,713
• Middle third	2,308	2,676	2,861	2,815	3,122	2,323	3,048
• Highest third	3,338	3,283	2,365	2,588	2,901	3,157	2,929
Balance sheet (December 31)							
Current assets / cow (\$)							
• Lowest third	197	262	167	366	457	227	368
• Middle third	237	430	390	468	693	419	460
• Highest third	358	472	260	556	734	607	794
Total assets / cow (\$)							
• Lowest third	3,127	2,497	3,311	3,467	3,052	5,860	5,169
• Middle third	2,834	4,631	4,793	4,367	4,296	3,524	4,527
• Highest third	4,366	4,549	3,441	4,367	4,832	4,567	4,480
Current liabilities / cow (\$)							
• Lowest third	296	119	248	349	303	319	403
• Middle third	143	383	341	374	289	408	308
• Highest third	452	410	346	333	282	532	472
Total liabilities / cow (\$)							
• Lowest third	1,508	1,386	2,144	1,603	1,802	1,779	1,347
• Middle third	602	1,860	1,463	1,272	1,083	1,159	1,220
• Highest third	1,191	1,375	1,068	1,514	1,421	1,434	1,336
Equity / cow (\$)							
• Lowest third	1,619	1,111	1,167	1,863	1,250	4,081	3,822
• Middle third	2,233	2,771	3,330	3,095	3,213	2,365	3,307
• Highest third	3,175	3,173	2,374	2,853	3,411	3,133	3,144

Table 4.1. DBAP 1995-2001 Summary - Business size and production efficiency by net farm income from operations per cwt.

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Business Size							
Number of cows							
• Lowest third	456	1,536	1,898	745	1,167	878	731
• Middle third	2,840	1,234	1,031	935	1,134	975	1,135
• Highest third	847	1,355	948	736	870	1,414	1,064
Number of heifers							
• Lowest third	270	908	1,074	372	674	589	306
• Middle third	1,518	685	541	624	661	538	497
• Highest third	446	608	583	266	415	741	626
Milk sold (million lbs)							
• Lowest third	6.76	21.66	28.06	13.30	20.40	14.63	11.82
• Middle third	44.59	20.73	19.31	17.09	21.15	18.21	21.39
• Highest third	14.54	22.85	16.85	12.24	17.68	29.61	19.45
FTE workers							
• Lowest third	11	30	32	17	26	19	15
• Middle third	52	25	21	18	21	18	23
• Highest third	18	24	17	12	17	24	18
Acres of pasture + cultivated land							
• Lowest third	551	1,237	1,633	374	677	504	440
• Middle third	2,296	848	317	430	537	250	341
• Highest third	538	491	574	356	328	696	531
Production Efficiency							
Milk sold / cow (lbs)							
• Lowest third	13,636	14,493	15,241	16,672	16,351	15,438	16,118
• Middle third	15,729	15,966	17,943	17,800	17,972	18,941	17,731
• Highest third	17,687	16,862	16,381	16,372	19,597	18,624	17,660
Cows / FTE worker							
• Lowest third	46.68	47.64	48.36	49.83	60.85	42.60	51.09
• Middle third	67.52	52.48	53.30	54.92	60.17	55.67	51.48
• Highest third	56.45	63.90	60.67	62.67	55.68	62.62	52.02
Milk sold / FTE worker (million lbs)							
• Lowest third	0.62	0.67	0.72	0.83	0.98	0.66	0.82
• Middle third	1.02	0.80	0.94	0.95	1.04	1.01	0.92
• Highest third	0.94	1.01	0.98	0.98	1.06	1.18	0.91
Cull rate							
• Lowest third	0.44	0.40	0.32	0.39	0.39	0.42	0.39
• Middle third	0.37	0.33	0.36	0.39	0.33	0.33	0.37
• Highest third	0.24	0.27	0.37	0.37	0.31	0.39	0.31

Table 4.2. DBAP 1995-2001 Summary - Revenues by net farm income from operations per cwt.

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Revenues (per cwt)							
Milk sold (\$)							
• Lowest third	15.35	18.35	16.21	18.28	17.42	16.84	18.17
• Middle third	15.38	18.26	16.75	18.25	18.20	16.34	18.50
• Highest third	15.03	18.54	17.08	18.52	17.67	16.99	18.05
Raised, leased cow sales (\$)							
• Lowest third	0.47	0.41	0.69	0.41	0.19	0.91	0.12
• Middle third	1.02	1.08	0.55	0.62	0.62	0.33	0.68
• Highest third	1.14	1.77	0.76	0.38	0.75	0.68	0.89
Heifer sales (\$)							
• Lowest third	0.32	0.13	0.15	0.14	0.02	0.58	0.12
• Middle third	(0.07)	0.38	0.16	0.04	0.13	0.24	0.35
• Highest third	0.31	0.27	0.28	0.26	0.47	0.42	0.41
Gain on purchased livestock sales (\$)							
• Lowest third	0.00	(0.29)	(0.05)	(0.29)	(0.17)	(0.28)	(0.79)
• Middle third	0.00	0.04	(0.01)	(0.07)	(0.24)	(0.05)	0.03
• Highest third	0.00	0.00	0.36	0.00	(0.13)	0.21	0.53
Other revenues (\$)							
• Lowest third	0.72	0.77	0.41	0.67	0.64	0.43	0.53
• Middle third	0.39	0.67	0.02	0.45	0.86	0.31	1.07
• Highest third	0.96	0.34	0.82	0.52	0.63	0.79	1.33
Total revenues (\$)							
• Lowest third	16.85	19.38	17.41	19.21	18.11	18.48	18.15
• Middle third	16.72	20.42	17.47	19.30	19.56	17.17	20.63
• Highest third	17.45	20.93	19.30	19.69	19.40	19.09	21.21

Table 4.3. DBAP 1995-2001 Summary - Costs by net farm income from operations per cwt.

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Costs (per cwt)							
Personnel (\$)							
• Lowest third	2.62	2.60	3.01	2.58	2.44	3.45	3.12
• Middle third	3.08	2.34	2.20	2.24	2.60	2.46	2.65
• Highest third	2.49	2.42	2.02	1.86	2.01	2.13	2.31
Purchased feed (\$)							
• Lowest third	8.09	9.15	8.88	8.37	7.74	8.11	7.50
• Middle third	7.21	8.96	8.32	7.82	6.90	6.68	8.27
• Highest third	7.68	8.30	8.04	6.87	6.53	6.11	6.20
Crops (\$)							
• Lowest third	0.38	0.43	0.39	0.33	0.31	0.28	0.13
• Middle third	0.21	0.31	0.14	0.31	0.29	0.18	0.65
• Highest third	0.13	0.19	0.33	0.31	0.33	0.40	0.64
Machinery (\$)							
• Lowest third	0.89	1.33	0.96	0.98	1.01	0.92	0.86
• Middle third	0.75	0.76	0.77	0.85	0.88	0.84	1.02
• Highest third	0.69	0.57	0.73	0.67	0.74	0.84	1.14
Livestock (\$)							
• Lowest third	2.08	1.82	2.23	1.78	1.48	2.07	1.54
• Middle third	2.04	2.82	2.16	1.53	1.79	1.49	1.77
• Highest third	1.85	2.11	2.55	1.37	1.26	1.57	1.61
Milk marketing (\$)							
• Lowest third	1.29	1.08	1.02	1.21	1.05	1.03	1.05
• Middle third	1.19	1.01	1.08	0.97	0.98	1.08	0.91
• Highest third	1.16	0.87	1.09	1.10	1.11	1.20	1.17
Buildings and land (\$)							
• Lowest third	0.71	0.50	0.55	0.71	0.45	0.48	0.40
• Middle third	0.46	0.45	0.51	0.60	0.76	0.64	0.85
• Highest third	0.19	0.54	0.54	0.64	0.59	0.77	0.65
Interest (\$)							
• Lowest third	0.76	1.01	0.97	0.86	0.70	0.97	0.79
• Middle third	0.67	0.69	0.53	0.71	0.50	0.50	0.39
• Highest third	0.65	0.55	0.58	0.53	0.45	0.52	0.65
Depreciation:							
- Livestock (\$)							
• Lowest third	0.00	0.00	0.04	0.77	0.83	0.81	0.65
• Middle third	0.00	0.01	0.09	0.79	0.61	0.87	0.68
• Highest third	0.00	0.00	0.09	1.05	0.68	0.95	0.69
- Machinery (\$)							
• Lowest third	0.95	0.72	0.57	0.63	0.32	0.58	0.42
• Middle third	0.29	0.50	0.28	0.29	0.40	0.46	0.55
• Highest third	0.27	0.29	0.22	0.42	0.36	0.29	0.52

Table 4.3. DBAP 1995-2001 Summary - Costs by net farm income from operations per cwt (continued).

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
- Buildings (\$)							
• Lowest third	1.38	0.75	0.21	0.29	0.16	0.30	0.20
• Middle third	0.25	0.22	0.14	0.21	0.10	0.10	0.17
• Highest third	0.07	0.31	0.10	0.12	0.15	0.28	0.35
Other expenses (\$)							
• Lowest third	1.06	0.67	1.02	1.04	0.82	0.65	1.11
• Middle third	0.81	0.73	0.69	0.76	0.82	0.67	0.76
• Highest third	0.71	0.54	0.58	0.72	0.55	0.88	0.87
Total expenses (\$)							
• Lowest third	20.20	20.07	19.85	19.54	17.32	19.65	17.78
• Middle third	16.95	18.78	16.91	17.08	16.64	15.97	18.68
• Highest third	15.88	16.69	16.87	15.66	14.76	15.94	16.81
Net farm income from operations (\$)							
• Lowest third	(3.34)	(0.69)	(2.44)	(0.33)	0.79	1.17	0.38
• Middle third	(0.23)	1.64	0.55	2.22	2.92	1.20	1.96
• Highest third	1.57	4.24	2.43	4.03	4.64	3.15	4.40
Gain on sale of capital assets (\$)							
• Lowest third	2.04	0.49	3.04	0.22	0.16	0.10	0.06
• Middle third	0.63	0.48	0.15	0.01	0.20	(0.15)	0.28
• Highest third	0.07	0.41	0.16	0.05	(0.05)	(0.05)	0.10
Net farm income (\$)							
• Lowest third	(1.30)	(0.21)	0.60	(0.11)	0.95	(1.06)	0.43
• Middle third	0.40	2.12	0.70	2.23	3.12	1.17	2.24
• Highest third	1.64	4.65	2.58	4.07	4.60	3.17	4.50

Table 4.4. DBAP 1995-2001 Summary - Financial performance by net farm income from operations per cwt.

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Liquidity							
Current ratio							
• Lowest third	1.59	1.33	1.76	82.82	14.84	0.60	1.22
• Middle third	0.56	1.55	19.13	5.58	1.91	2.37	3.16
• Highest third	3.61	4.33	1.91	429.83	26.90	3.01	3.42
Working capital							
• Lowest third	(16,483)	(299,407)	(315,734)	154,514	311,875	(190,075)	16,716
• Middle third	(719,352)	197,882	(104,991)	29,334	41,420	(185,020)	216,967
• Highest third	112,576	195,183	148,344	245,322	650,449	400,622	322,280
Solvency							
Debt to asset ratio							
• Lowest third	0.29	0.51	0.62	0.46	0.55	0.44	0.35
• Middle third	0.19	0.37	0.33	0.41	0.36	0.32	0.29
• Highest third	0.24	0.41	0.36	0.37	0.33	0.32	0.30
Equity to asset ratio							
• Lowest third	0.71	0.49	0.38	0.54	0.45	0.56	0.65
• Middle third	0.81	0.63	0.67	0.59	0.64	0.68	0.71
• Highest third	0.76	0.59	0.64	0.63	0.67	0.68	0.70
Debt to equity ratio							
• Lowest third	0.59	9.84	(1.00)	(31.95)	3.64	0.92	1.10
• Middle third	0.28	0.73	2.52	1.88	1.59	0.73	0.52
• Highest third	0.59	5.37	0.87	1.05	0.70	0.57	0.54
Profitability							
Rate of return on assets							
• Lowest third	(0.26)	(0.01)	(0.10)	(0.02)	0.03	(0.01)	0.02
• Middle third	0.01	0.06	0.05	0.11	0.16	0.06	0.09
• Highest third	0.13	0.31	0.14	0.28	0.26	0.16	0.16
Rate of return on equity							
• Lowest third	(0.34)	(0.23)	0.06	(6.21)	(0.07)	(0.07)	(0.01)
• Middle third	(0.04)	0.07	(0.50)	(0.16)	(3.63)	0.06	0.11
• Highest third	0.14	0.44	0.21	0.99	0.57	0.21	0.22
Operating profit margin ratio							
• Lowest third	(0.26)	(0.01)	(0.20)	(0.02)	0.05	(0.07)	0.01
• Middle third	(0.00)	0.07	0.03	0.12	0.16	0.07	0.08
• Highest third	0.10	0.21	0.11	0.19	0.24	0.16	0.18
Financial efficiency							
Asset turnover rate							
• Lowest third	0.82	0.72	0.64	0.95	0.95	0.63	0.83
• Middle third	1.04	1.00	1.05	0.91	1.05	0.93	1.02
• Highest third	1.45	1.30	1.28	1.57	1.06	1.11	0.83
Operating expense ratio							
• Lowest third	1.02	0.91	1.04	0.89	0.85	0.92	0.87
• Middle third	0.94	0.85	0.91	0.78	0.77	0.82	0.82
• Highest third	0.86	0.75	0.82	0.69	0.68	0.73	0.69

Table 4.4. DBAP 1995-2001 Summary - Financial performance by net farm income from operations per cwt (continued).

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Depreciation expense ratio							
• Lowest third	0.13	0.07	0.05	0.09	0.07	0.09	0.07
• Middle third	0.03	0.04	0.03	0.07	0.06	0.08	0.07
• Highest third	0.02	0.03	0.02	0.08	0.06	0.08	0.07
Interest expense ratio							
• Lowest third	0.04	0.05	0.05	0.04	0.04	0.05	0.04
• Middle third	0.04	0.03	0.03	0.04	0.03	0.03	0.02
• Highest third	0.04	0.03	0.03	0.03	0.02	0.03	0.03
Net farm income ratio							
• Lowest third	(0.19)	(0.03)	(0.14)	(0.02)	0.04	(0.07)	0.02
• Middle third	(0.01)	0.08	0.03	0.11	0.15	0.07	0.09
• Highest third	0.09	0.20	0.13	0.21	0.24	0.17	0.21
Repayment capacity							
Cash flow coverage ratio							
• Lowest third	(0.24)	0.40	(0.92)	58.24	8.81	0.73	3.82
• Middle third	0.15	0.41	29.83	6.96	3.16	3.32	1.84
• Highest third	1.44	2.88	1.11	338.47	21.31	8.94	3.96
Term debt coverage ratio ¹							
• Lowest third	0.00	0.00	(0.51)	38.65	0.00	0.46	3.18
• Middle third	0.00	0.00	2.09	10.17	2.87	1.64	21.66
• Highest third	0.00	0.00	69.97	7.18	61.85	30.06	5.04
Capital replacement margin ²							
• Lowest third	(71,823)	(60,690)	(525,297)	(155,656)	(38,516)	(279,085)	75,054
• Middle third	(442,265)	275,004	(90,780)	423,258	614,297	167,497	376,834
• Highest third	150,179	661,175	246,741	334,131	624,094	541,949	706,714

¹Term debt and capital lease coverage ration.²Capital replacement and term debt repayment margin.

Table 4.5. DBAP 1995-2001 Summary - Balance sheet by net farm income from operations per cwt.

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Balance sheet (January 1)							
Current assets / cow (\$)							
• Lowest third	304	295	252	295	451	377	241
• Middle third	249	313	336	374	490	414	462
• Highest third	298	252	326	295	717	600	651
Total assets / cow (\$)							
• Lowest third	4,348	4,584	4,833	4,625	3,182	5,983	4,795
• Middle third	3,182	3,782	3,725	4,124	4,364	4,126	4,007
• Highest third	2,584	3,340	2,814	2,982	4,072	3,680	4,803
Current liabilities / cow (\$)							
• Lowest third	258	533	344	673	528	581	299
• Middle third	373	538	417	642	690	441	350
• Highest third	344	375	354	532	399	630	481
Total liabilities / cow (\$)							
• Lowest third	1,371	2,049	2,529	1,678	1,609	1,755	1,463
• Middle third	753	1,483	1,087	1,579	1,571	1,121	966
• Highest third	828	999	1,084	1,308	1,170	1,348	1,486
Equity / cow (\$)							
• Lowest third	2,977	2,535	2,305	2,947	1,573	4,228	3,332
• Middle third	2,430	2,298	2,638	2,545	2,792	3,005	3,041
• Highest third	1,756	2,342	1,729	1,674	2,903	2,332	3,317
Balance sheet (December 31)							
Current assets / cow (\$)							
• Lowest third	301	356	212	333	513	280	252
• Middle third	225	388	291	529	529	372	630
• Highest third	271	419	329	525	883	614	740
Total assets / cow (\$)							
• Lowest third	4,511	4,587	5,092	4,710	3,266	5,970	4,984
• Middle third	3,182	3,702	3,722	4,221	4,371	4,026	4,303
• Highest third	2,519	3,386	2,884	3,277	4,524	3,812	4,889
Current liabilities / cow (\$)							
• Lowest third	287	373	385	323	288	512	371
• Middle third	311	325	352	517	397	379	404
• Highest third	237	214	195	209	162	376	408
Total liabilities / cow (\$)							
• Lowest third	1,635	2,122	2,673	1,789	1,733	2,229	1,532
• Middle third	806	1,374	1,078	1,477	1,299	1,080	1,033
• Highest third	793	1,125	978	1,113	1,219	1,085	1,338
Equity / cow (\$)							
• Lowest third	2,876	2,466	2,419	2,922	1,533	3,740	3,452
• Middle third	2,377	2,329	2,644	2,745	3,071	2,945	3,270
• Highest third	1,726	2,261	1,906	2,164	3,305	2,727	3,551

Table 5.1. DBAP 1995-2001 Summary - Business size and production efficiency by average dairy assets per cow (\$).

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Business Size							
Number of cows							
• Lowest third	1,327	2,058	1,221	696	872	818	1,138
• Middle third	2,147	937	1,679	913	1,339	1,473	1,220
• Highest third	899	1,130	883	809	908	833	571
Number of heifers							
• Lowest third	319	828	482	93	109	292	471
• Middle third	1,445	622	1,018	599	836	806	548
• Highest third	494	752	630	571	760	693	412
Milk sold (million lbs)							
• Lowest third	19.73	28.39	18.26	11.07	13.86	16.23	21.25
• Middle third	34.61	16.98	28.72	16.43	25.93	25.99	20.17
• Highest third	14.87	19.87	15.91	15.16	18.25	18.01	11.22
FTE workers							
• Lowest third	24	33	19	9	11	13	21
• Middle third	40	22	32	21	32	28	22
• Highest third	20	24	17	17	19	17	12
Acres of pasture + cultivated land							
• Lowest third	1,204	1,532	699	184	253	179	312
• Middle third	1,686	309	1,105	465	668	649	606
• Highest third	698	735	607	509	587	508	393
Production Efficiency							
Milk sold / cow (lbs)							
• Lowest third	14,178	13,668	15,493	15,040	15,773	17,780	17,632
• Middle third	16,094	16,574	17,997	17,384	18,216	17,513	16,426
• Highest third	16,659	17,080	16,067	18,443	19,870	18,119	17,451
Cows / FTE worker							
• Lowest third	49.60	76.18	71.30	71.83	84.83	58.19	59.78
• Middle third	72.65	43.01	45.93	50.87	48.17	56.39	54.15
• Highest third	46.69	45.14	46.16	44.93	46.69	46.11	40.66
Milk sold / FTE worker (million lbs)							
• Lowest third	0.71	1.01	1.09	1.06	1.32	1.03	1.06
• Middle third	1.11	0.68	0.82	0.88	0.88	0.98	0.89
• Highest third	0.75	0.78	0.75	0.82	0.92	0.85	0.71
Cull rate							
• Lowest third	0.24	0.34	0.37	0.33	0.36	0.39	0.35
• Middle third	0.38	0.35	0.31	0.41	0.33	0.37	0.36
• Highest third	0.43	0.33	0.38	0.40	0.34	0.38	0.36

Table 5.2. DBAP 1995-2001 Summary - Revenues by average dairy assets per cow (\$).

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Revenues (per cwt)							
Milk sold (\$)							
• Lowest third	15.21	18.65	17.03	18.47	17.79	16.75	18.63
• Middle third	15.25	18.20	16.65	18.33	17.89	16.86	18.25
• Highest third	15.33	18.30	16.38	18.25	17.70	16.41	17.85
Raised, leased cow sales (\$)							
• Lowest third	0.91	1.78	0.53	0.33	0.47	0.18	0.53
• Middle third	1.05	0.57	1.01	0.33	0.53	0.85	0.71
• Highest third	0.66	0.91	0.38	0.76	0.59	0.74	0.45
Heifer sales (\$)							
• Lowest third	0.06	0.33	0.25	0.09	0.35	0.66	0.37
• Middle third	0.26	0.33	0.03	0.21	0.19	0.62	0.36
• Highest third	0.15	0.12	0.32	0.13	0.07	(0.14)	0.14
Gain on purchased livestock sales (\$)							
• Lowest third	0.00	0.00	0.30	(0.08)	(0.46)	0.30	(0.03)
• Middle third	0.00	(0.29)	(0.11)	(0.00)	(0.13)	(0.09)	(0.18)
• Highest third	0.00	0.04	0.12	(0.27)	0.03	(0.33)	(0.01)
Other revenues (\$)							
• Lowest third	0.68	0.41	0.17	0.37	0.38	0.71	0.59
• Middle third	0.56	0.40	0.33	0.63	0.72	0.36	0.71
• Highest third	0.77	0.97	0.70	0.64	1.07	0.46	1.63
Total revenues (\$)							
• Lowest third	16.86	21.18	18.28	19.18	18.53	18.60	20.09
• Middle third	17.12	19.21	17.92	19.49	19.19	18.60	19.85
• Highest third	16.90	20.34	17.90	19.51	19.45	17.14	20.06

Table 5.3. DBAP 1995-2001 Summary - Costs by average dairy assets per cow (\$).

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Costs (per cwt)							
Personnel (\$)							
• Lowest third	2.83	2.26	1.74	1.77	2.00	2.02	2.56
• Middle third	2.61	2.24	2.58	2.23	2.65	3.10	2.75
• Highest third	2.90	2.87	2.86	2.68	2.38	2.72	2.76
Purchased feed (\$)							
• Lowest third	7.69	8.66	7.84	7.49	6.99	6.49	8.09
• Middle third	7.74	9.48	9.22	7.74	7.56	7.58	7.53
• Highest third	7.37	8.28	8.05	7.83	6.46	6.57	6.36
Crops (\$)							
• Lowest third	0.17	0.34	0.12	0.09	0.11	0.28	0.12
• Middle third	0.18	0.13	0.22	0.43	0.32	0.24	0.29
• Highest third	0.38	0.48	0.50	0.42	0.49	0.31	1.02
Machinery (\$)							
• Lowest third	0.79	0.53	0.56	0.55	0.49	0.77	0.83
• Middle third	0.59	0.99	0.85	1.03	1.02	0.74	0.91
• Highest third	1.00	1.14	1.04	0.92	1.09	1.13	1.28
Livestock (\$)							
• Lowest third	2.05	3.07	2.97	1.60	1.63	1.98	1.80
• Middle third	1.54	1.94	2.05	1.61	1.53	1.67	1.68
• Highest third	2.55	1.74	1.94	1.45	1.43	1.43	1.44
Milk marketing (\$)							
• Lowest third	1.02	0.88	1.18	1.20	1.20	1.40	1.15
• Middle third	1.28	1.07	1.01	1.03	1.07	0.93	0.94
• Highest third	1.31	1.00	1.01	1.05	0.85	1.01	1.05
Buildings and land (\$)							
• Lowest third	0.57	0.65	0.60	0.80	1.01	1.18	0.78
• Middle third	0.38	0.35	0.47	0.63	0.37	0.39	0.61
• Highest third	0.44	0.49	0.54	0.52	0.53	0.40	0.51
Interest (\$)							
• Lowest third	0.73	0.67	0.59	0.64	0.54	0.56	0.47
• Middle third	0.59	0.76	0.75	0.74	0.73	0.71	0.60
• Highest third	0.80	0.81	0.71	0.71	0.33	0.65	0.76
Depreciation:							
- Livestock (\$)							
• Lowest third	0.00	0.00	0.12	1.37	1.16	1.28	1.03
• Middle third	0.00	0.00	0.03	0.60	0.53	0.89	0.60
• Highest third	0.00	0.01	0.08	0.66	0.44	0.46	0.39
- Machinery (\$)							
• Lowest third	0.00	0.29	0.19	0.38	0.30	0.35	0.40
• Middle third	0.72	0.53	0.31	0.46	0.30	0.26	0.34
• Highest third	0.64	0.68	0.57	0.49	0.51	0.76	0.76

Table 5.3. DBAP 1995-2001 Summary - Costs by average dairy assets per cow (\$) (continued).

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
- Buildings (\$)							
• Lowest third	0.00	0.15	0.06	0.06	0.04	0.11	0.14
• Middle third	0.84	0.68	0.14	0.26	0.17	0.19	0.20
• Highest third	0.66	0.46	0.26	0.29	0.19	0.36	0.37
Other expenses (\$)							
• Lowest third	0.97	0.60	0.60	0.70	0.63	0.61	0.86
• Middle third	0.76	0.65	0.83	0.82	0.75	0.76	0.89
• Highest third	0.85	0.69	0.84	1.00	0.83	0.85	0.99
Total expenses (\$)							
• Lowest third	16.82	18.09	16.58	16.65	16.11	17.03	18.23
• Middle third	17.22	18.83	18.44	17.57	17.00	17.46	17.34
• Highest third	18.89	18.62	18.40	18.03	15.52	16.65	17.69
Net farm income from operations (\$)							
• Lowest third	0.04	3.09	1.71	2.53	2.41	1.58	1.86
• Middle third	(0.10)	0.38	(0.52)	1.92	2.19	1.14	2.51
• Highest third	(1.99)	1.72	(0.50)	1.48	3.93	0.48	2.37
Gain on sale of capital assets (\$)							
• Lowest third	0.00	0.37	0.23	0.13	0.06	0.14	0.05
• Middle third	1.26	0.58	2.38	0.13	0.32	(0.06)	0.37
• Highest third	1.27	0.42	0.42	0.01	(0.10)	(0.20)	0.02
Net farm income (\$)							
• Lowest third	0.04	3.46	1.94	2.66	2.48	1.83	1.91
• Middle third	1.16	0.96	1.86	2.05	2.51	1.09	2.88
• Highest third	(0.72)	2.14	(0.08)	1.49	3.83	0.38	2.39

Table 5.4. DBAP 1995-2001 Summary - Financial performance by average dairy assets per cow (\$).

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Liquidity							
Current ratio							
• Lowest third	7.78	4.03	2.14	3.85	9.45	1.91	1.37
• Middle third	1.45	1.72	19.02	82.54	8.53	1.94	1.73
• Highest third	1.71	0.86	1.68	426.97	22.70	2.26	3.39
Working capital							
• Lowest third	256,742	(108,887)	(230,838)	210,578	235,591	157,940	120,419
• Middle third	(624,866)	212,704	(124,210)	174,144	509,954	(125,613)	165,594
• Highest third	(286,630)	(10,159)	85,413	36,402	141,065	(22,773)	269,949
Solvency							
Debt to asset ratio							
• Lowest third	0.00	0.55	0.50	0.54	0.54	0.43	0.43
• Middle third	0.30	0.42	0.42	0.43	0.50	0.43	0.30
• Highest third	0.37	0.32	0.38	0.26	0.17	0.20	0.22
Equity to asset ratio							
• Lowest third	1.00	0.45	0.50	0.46	0.46	0.57	0.57
• Middle third	0.70	0.58	0.58	0.57	0.50	0.57	0.70
• Highest third	0.63	0.68	0.62	0.74	0.83	0.80	0.78
Debt to equity ratio							
• Lowest third	0.00	13.41	2.69	(30.02)	4.50	0.94	1.28
• Middle third	0.64	2.01	(0.14)	0.59	1.25	0.95	0.50
• Highest third	0.69	0.52	0.21	0.49	0.25	0.28	0.39
Profitability							
Rate of return on assets							
• Lowest third	(0.08)	0.25	0.13	0.22	0.20	0.09	0.12
• Middle third	0.01	0.03	(0.02)	0.09	0.14	0.08	0.10
• Highest third	(0.04)	0.08	(0.02)	0.06	0.13	0.03	0.05
Rate of return on equity							
• Lowest third	(0.15)	0.26	(0.39)	(5.53)	(4.63)	0.12	0.18
• Middle third	(0.00)	(0.06)	0.09	0.09	0.35	0.06	0.12
• Highest third	(0.10)	0.08	(0.02)	0.05	0.15	0.03	0.03
Operating profit margin ratio							
• Lowest third	(0.05)	0.14	0.08	0.10	0.12	0.07	0.09
• Middle third	(0.01)	0.03	(0.03)	0.11	0.13	0.09	0.13
• Highest third	(0.10)	0.10	(0.09)	0.07	0.20	0.00	0.06
Financial efficiency							
Asset turnover rate							
• Lowest third	1.81	1.53	1.59	1.87	1.44	1.35	1.36
• Middle third	0.97	0.82	0.88	0.93	1.02	0.84	0.79
• Highest third	0.55	0.66	0.53	0.61	0.63	0.50	0.54
Operating expense ratio							
• Lowest third	0.96	0.81	0.85	0.75	0.77	0.80	0.81
• Middle third	0.89	0.88	0.97	0.79	0.80	0.83	0.79
• Highest third	0.99	0.82	0.94	0.81	0.72	0.84	0.77

Table 5.4. DBAP 1995-2001 Summary - Financial performance by average dairy assets per cow (\$) (continued).

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Depreciation expense ratio							
• Lowest third	0.00	0.02	0.02	0.09	0.08	0.09	0.08
• Middle third	0.08	0.06	0.03	0.07	0.05	0.07	0.06
• Highest third	0.08	0.06	0.05	0.07	0.06	0.09	0.07
Interest expense ratio							
• Lowest third	0.04	0.03	0.03	0.03	0.03	0.03	0.02
• Middle third	0.03	0.04	0.04	0.04	0.04	0.04	0.03
• Highest third	0.05	0.04	0.04	0.04	0.02	0.04	0.04
Net farm income ratio							
• Lowest third	0.00	0.14	0.09	0.13	0.12	0.08	0.09
• Middle third	(0.00)	0.02	(0.03)	0.10	0.11	0.06	0.12
• Highest third	(0.12)	0.09	(0.03)	0.08	0.20	0.03	0.11
Repayment capacity							
Cash flow coverage ratio							
• Lowest third	0.29	2.88	0.89	3.94	10.60	2.44	3.50
• Middle third	0.68	0.48	29.35	61.16	4.67	6.22	1.59
• Highest third	0.21	0.33	(0.15)	335.55	17.63	3.51	3.44
Term debt coverage ratio ¹							
• Lowest third	0.00	0.00	1.97	6.06	0.00	0.87	6.85
• Middle third	0.00	0.00	(0.19)	7.51	0.00	23.63	15.93
• Highest third	0.00	0.00	70.42	75.72	32.36	1.37	3.48
Capital replacement margin ²							
• Lowest third	39,459	303,036	(112,054)	359,248	481,253	86,519	462,079
• Middle third	(341,031)	159,099	(283,182)	36,044	196,405	246,677	507,835
• Highest third	(96,082)	413,354	53,386	227,953	626,689	74,542	188,688

¹Term debt and capital lease coverage ratio.²Capital replacement and term debt repayment margin.**Table 5.5.** DBAP 1995-2001 Summary - Balance sheet by average dairy assets per cow (\$).

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Balance sheet (January 1)							
Current assets / cow (\$)							
• Lowest third	183	150	215	189	424	441	297
• Middle third	273	379	305	277	462	430	479
• Highest third	387	331	397	502	779	516	578
Total assets / cow (\$)							
• Lowest third	1,346	2,133	1,942	1,899	2,170	2,558	2,536
• Middle third	3,128	4,027	3,532	3,591	3,382	3,919	4,154
• Highest third	5,658	5,546	5,926	6,270	6,312	7,370	6,914
Current liabilities / cow (\$)							
• Lowest third	7	433	328	339	502	541	365
• Middle third	416	410	372	743	596	627	337
• Highest third	538	603	420	761	542	432	427

Table 5.5. DBAP 1995-2001 Summary - Balance sheet by average dairy assets per cow (\$) (continued).

Category	1995	1996	1997	1998	1999	2000	2001
Number of farms	20	27	44	55	26	23	39
Total liabilities / cow (\$)							
• Lowest third	7	1,047	949	1,202	1,337	1,258	1,118
• Middle third	1,101	1,719	1,557	1,697	1,876	1,580	1,357
• Highest third	1,728	1,765	2,126	1,660	1,060	1,257	1,440
Equity / cow (\$)							
• Lowest third	1,339	1,086	993	698	833	1,301	1,419
• Middle third	2,027	2,308	1,974	1,894	1,505	2,340	2,797
• Highest third	3,930	3,781	3,800	4,610	5,252	6,114	5,474
Balance sheet (December 31)							
Current assets / cow (\$)							
• Lowest third	178	250	226	367	464	425	426
• Middle third	266	471	247	436	545	403	505
• Highest third	337	443	365	590	912	429	691
Total assets / cow (\$)							
• Lowest third	1,330	2,227	1,979	2,144	2,278	2,633	2,859
• Middle third	3,100	4,091	3,829	3,716	3,552	4,008	4,248
• Highest third	5,810	5,358	5,875	6,377	6,535	7,171	7,069
Current liabilities / cow (\$)							
• Lowest third	5	201	284	274	269	362	455
• Middle third	324	260	382	377	216	444	360
• Highest third	503	451	262	405	408	442	368
Total liabilities / cow (\$)							
• Lowest third	5	1,166	951	1,220	1,307	1,131	1,251
• Middle third	1,034	1,761	1,656	1,613	1,778	1,716	1,267
• Highest third	2,118	1,694	2,039	1,538	1,046	1,365	1,384
Equity / cow (\$)							
• Lowest third	1,325	1,061	1,027	924	971	1,502	1,607
• Middle third	2,065	2,330	2,173	2,103	1,774	2,292	2,981
• Highest third	3,692	3,664	3,836	4,838	5,489	5,806	5,685