

**TABLE 1**Dairy Farm Business Summary selected factors, sorted by return on all capital without appreciation, 155 New York dairy farms, preliminary 2019<sup>1</sup>

<b>SELECTED FACTORS</b>	<b>Group 1 Average of lowest quartile</b>	<b>Group 2 Average of 2nd quartile</b>	<b>Group 3 Average of 3rd quartile</b>	<b>Group 4 Average of Top quartile</b>
<b>Size of business</b>				
Average number of cows	360	840	1,167	1,608
Average number of heifers	291	704	947	1,280
Milk sold, pounds	9,061,086	21,389,364	30,412,919	43,554,517
Worker equivalent	8.9	17.8	23.4	29.2
Total tillable acres	822	1,712	2,142	2,504
<b>Rates of production</b>				
Milk sold per cow, pounds	25,161	25,470	26,061	27,092
Hay DM per acre, tons	2.94	3.11	3.36	3.22
Corn silage per acre, tons	17.63	18.85	18.18	18.95
Cull rate, percent	37%	35%	35%	33%
<b>Labor efficiency</b>				
Cows per worker	40.3	47.2	49.8	55.1
Milk sold per worker, pounds	1,013,639	1,201,031	1,297,111	1,493,981
<b>Cost control and milk price</b>				
Grain & concentrate per cwt. milk	\$5.98	\$5.84	\$5.44	\$5.69
Net milk income over purchased grain & conc. per cow	\$2,654	\$3,094	\$3,278	\$3,416
Dairy feed & crop expense per cwt. milk	\$7.56	\$7.16	\$6.78	\$7.01
Labor and machinery costs per cow	\$2,137	\$1,798	\$1,763	\$1,593
Hired labor costs per cwt. milk	\$2.99	\$3.14	\$3.14	\$2.73
Hired labor costs per worker equivalent	\$42,660	\$45,423	\$46,459	\$45,051
Operating cost of producing milk per cwt.	\$17.59	\$16.13	\$15.60	\$14.53
Purchased input cost of producing milk per cwt.	\$19.58	\$17.83	\$17.09	\$16.01
Total cost of producing milk per cwt.	\$22.52	\$20.18	\$19.20	\$17.96
Net milk price	\$18.04	\$18.19	\$18.27	\$18.33
<b>Capital efficiency (average for year)</b>				
Farm capital per cow	\$13,168	\$11,733	\$11,426	\$10,963
Machinery and equipment per cow	\$2,709	\$1,894	\$1,613	\$1,563
Asset turnover ratio	0.43	0.49	0.52	0.56
<b>Profitability</b>				
Net farm income without appreciation	-\$27,654	\$317,833	\$704,771	\$1,521,133
Net farm income without appreciation per cow	-\$77	\$378	\$604	\$946
Net farm income with appreciation	\$97,439	\$561,905	\$1,094,158	\$1,908,969
Net farm income with appreciation per cow	\$271	\$669	\$938	\$1,187
Labor & management income per operator/manager	-\$91,328	\$3,979	\$106,684	\$380,641
Rate return on equity capital with appreciation	-0.9%	5.9%	10.3%	13.7%
Rate return on equity capital without appreciation	-5.3%	2.0%	5.7%	10.6%
Rate return on all capital with appreciation	1.5%	5.6%	8.4%	11.0%
Rate return on all capital without appreciation	-1.1%	3.1%	5.5%	8.8%
<b>Financial summary (based on market value, excluding deferred taxes)</b>				
Farm net worth, end year	\$2,859,694	\$6,321,262	\$8,975,633	\$12,815,622
Debt-to-asset ratio	0.4	0.37	0.35	0.3
Farm debt per cow	\$5,324	\$4,295	\$3,983	\$3,273
Debt coverage ratio*	0.64	1.23	1.64	2.51

\*Average of farms reporting milk check detail    \*\*Farm participating two years

<sup>1</sup>Groups determined by rate of return to all capital w/o appreciation

**TABLE 1, CONT'D**Dairy Farm Business Summary selected factors, sorted by return on all capital without appreciation, 155 New York dairy farms, preliminary 2019<sup>1</sup>

<b>SELECTED FACTORS</b>	<b>Group 1 Average of Lowest quartile</b>	<b>Group 2 Average of 2nd quartile</b>	<b>Group 3 Average of 3rd quartile</b>	<b>Group 4 Average of Top quartile</b>
<b>Income generation</b>				
% Butterfat*	3.90%	3.96%	3.89%	3.90%
% Protein*	3.07%	3.10%	3.10%	3.12%
Lbs. of butterfat and protein per cow*	1,761	1,795	1,823	1,902
Component value per cwt.*	\$18.19	\$18.42	\$18.29	\$18.35
Gross milk price	\$19.27	\$19.31	\$19.41	\$19.51
<b>Balance sheet analysis</b>				
Working capital as % of operating expenses	13%	15%	20%	31%
Long-term debt to asset ratio	0.39	0.28	0.32	0.28
Intermediate/current debt-to-asset ratio	0.42	0.46	0.37	0.31
<b>Debt-to-asset ratio, total</b>	<b>0.4</b>	<b>0.37</b>	<b>0.35</b>	<b>0.3</b>
<b>Debt analysis</b>				
Accounts payable as percent of total debt	7%	3%	4%	3%
Long-term debt as percent of total debt	44%	38%	46%	41%
Current & intermediate debt as percent of total debt	56%	62%	54%	59%
Cost of term debt (weighted average)	4.7%	4.4%	4.6%	4.1%
<b>Net worth change</b>				
Retained earnings	-\$92,299	\$144,132	\$404,071	\$1,051,770
Contributed capital	\$27,612	\$34,952	\$109,846	\$26,758
Valuation equity	\$96,141	\$183,419	\$229,955	\$257,254
<b>Cash flow</b>				
Net provided by operating activities, per cow	\$194	\$422	\$520	\$690
Net provided by investing activities, per cow	-\$452	-\$474	-\$612	-\$606
Net provided by financing activities, per cow	\$293	\$33	\$119	-\$54
Net provided by reserves, per cow	-\$41	\$4	-\$26	-\$27
<b>Repayment analysis**</b>				
Planned debt payments per cow	\$807	\$663	\$572	\$489
Planned debt payments per cwt.	\$3.19	\$2.60	\$2.19	\$1.80
Percent of total receipts	15%	12%	10%	9%
Percent of milk receipts	17%	14%	12%	10%
Cash flow coverage ratio	0.60	0.97	1.27	1.76
Debt coverage ratio	0.64	1.23	1.64	2.51
<b>Crop program analysis</b>				
Crop input costs per acre	\$121	\$131	\$148	\$138
Total tillable acres per cow	2.28	2.04	1.87	1.62
Total forages acres per cow	1.94	1.74	1.61	1.44
Harvested dry matter per cow	8.18	8.20	7.62	6.99
Percent tillable land owned	51%	51%	54%	52%
<b>Capital and financial efficiency</b>				
Farm capital per cow	\$13,168	\$11,733	\$11,426	\$10,963
Real estate per cow	\$6,113	\$5,832	\$5,627	\$4,882
Machinery and equipment per cow	\$2,709	\$1,894	\$1,613	\$1,563
Asset turnover	0.43	0.49	0.52	0.56
Operating expense ratio	0.87	0.81	0.79	0.74
Interest expense ratio	0.05	0.04	0.04	0.03
Depreciation expense ratio	0.09	0.08	0.07	0.07

\*Average of farms reporting milk check detail      \*\*Farm participating two years

<sup>1</sup>Groups determined by rate of return to all capital w/o appreciation