

Farm statistical survey 2020

50/50 Sharemilker – Irrigated

2020 Farm statistical survey

Produced by Alexanders in association
with Brown Glassford

Background

- The survey data has been taken from the two Practices' clients' actual Financial Statements for the 2020 year. As in previous years, we have combined the survey so that all farm sector groups have a reasonably sound sample size.
- All financial data is GST exclusive.
- Most of the balance dates are 31/3/2020, 31/5/2020 or 30/6/2020.
- The averages referred to are per farm and as per that farm's actual Financial Statements for the 2020 year – the averages are not weighted averages which would produce slightly different data again – as a result of this there is some rounding of data.
- Benchmark. On the right hand side of each survey summary for each sector, we have shown the average figures for the top 10% based on the interest return on total farm capital employed. Figures in the right column are the average of those top farms for each statistic. We could have chosen other benchmarks or several benchmarks but the interest return on total farm capital employed means we can compare farmers with differing levels of debt, scale and production and also make a comparison between sectors. This approach also means we are looking at both the income and expense side of the equation, and the net farm profit, whereas some benchmarks and ratios look at specific areas and issues very well but many are only looking at one side of the equation. We readily acknowledge though that there could be other benchmark approaches equally meaningful.

Key statistics

	Overall Average 2016	Overall Average 2017	Overall Average 2018	Overall Average 2019	Overall Average 2020	Benchmark Group 2020	Your Figures
Average Cows Milked (ACM)	973	853	850	851	980	1,570	
Average Value of Milk Solid Sales (Kg)	\$1.84	\$2.80	\$3.23	\$3.11	\$3.22	\$2.87	
Milk Solid Revenue/ACM	\$817	\$1,228	\$1,373	\$1,280	\$1,356	\$1,245	
Milk Solid Revenue/EGA	\$2,848	\$3,970	\$4,703	\$4,319	\$4,805	\$4,447	
FWE per kg of Milk Solids	\$2.22	\$2.40	\$2.81	\$2.49	\$2.40	\$2.08	
Interest & Rent Paid/Kg MS	\$0.31	\$0.31	\$0.33	\$0.36	\$0.27	\$0.39	
Net Farm Profit	(\$126,330)	\$240,706	\$217,771	\$188,143	\$328,343	\$399,934	
Total Term Debt	\$1,676,774	\$1,619,885	\$1,691,146	\$1,270,686	\$1,534,100	\$1,538,757	
Total Cost of Production/ KG MS	\$2.72	\$2.84	\$3.13	\$3.10	\$2.89	\$2.67	

Key features

1. Average cows milked (ACM) – 901 (Note 2).
2. Average milk solids production – 378,449 kg (Note 2).
3. Average milk solid receipt – \$2.84/kg.
4. Average milk solids per average cows milked – 426 kg (Note 2).
5. Average milk solids per effective grazing area – 1,454 kg (Note 2).
6. Average gross farm income (GFI) – \$1,268,304.
7. Average farm working expenses per kg/ms – \$2.46/kg.
8. Average interest and rent paid per kg/ms – \$0.32/kg (Note 3).
9. Average net farm profit – \$169,727 (Note 1).
10. Average net capital plant purchases – \$41,260 (Note 2).
11. Average term debt – \$1,558,518 (Note 2).
12. Average total farm capital (TFC) – \$2,332,140 (Note 2).

Notes:

1. There was an average (loss) in the 2016 year of (\$126,330) which pulled down the five year average – if that year is excluded, then the average net farm profit for the last four years has been \$243,741.
2. The averages have not altered much over the five years.
3. Low debt servicing.

Key features

Where do the benchmark groups differ from the average group?

1. Higher average cows milked by 590 cows, or 60.2% higher.
2. Lower farm working expenses per kg/ms by \$0.32, or 13.34% lower.
3. Lower capital plant purchases by \$13,389 or 44.4% lower.
4. Higher gross farm income by \$350,219, or 24.9% higher.
5. Higher interest payment by \$89,853, or 79% higher.
6. Higher net profit by \$71,500, or 21.8% higher.
7. Total farm capital and total term debt are similar, which looks unusual – comes about with family and leasing type arrangements.

What would an economist say about the 2020 year average net farm profit of \$328,343?

Net farm profit	\$328,343
Plus interest and rent paid	\$113,585
	<hr/>
	\$441,928
Less wages of management (say)	(\$125,000)
	<hr/>
Estimated interest surplus return	\$316,928
Estimated interest return: $\$316,928 \div \$228,333 =$	13.8%

Suggested key issues arising from 2020 year:

1. More and more 50/50 sharemilkers are tending to purchase land – usually run off blocks or small blocks with a house which is rented.
2. The average net equity is \$750,000, but there is a lot of variation.
3. Securing term debt is more difficult than servicing the same term debt.
4. Personal drawings are only 25.7% of the net profit – a good feature.

Four key ratios for the 2020 year

Total cost of production per kilogram of milk solid

\$2.89

overall

\$2.67

average

Average value of milk solids sales (kg)

\$3.22

overall

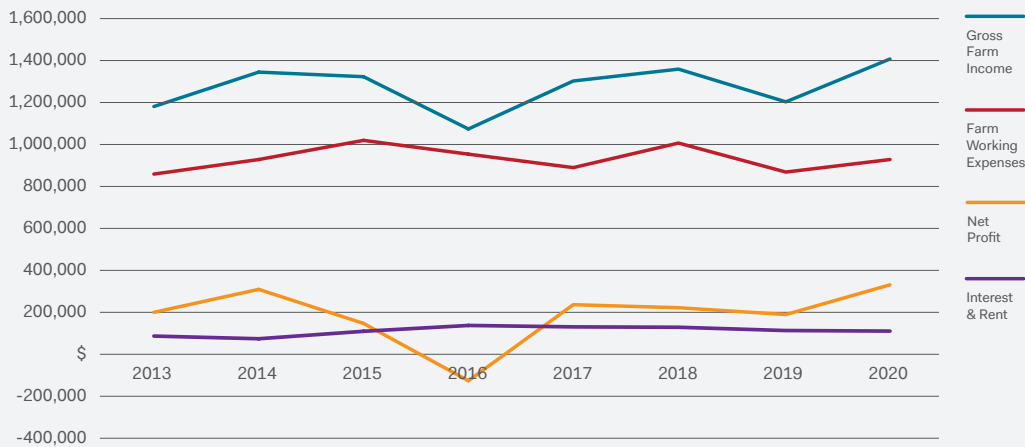
\$2.87

top 10%

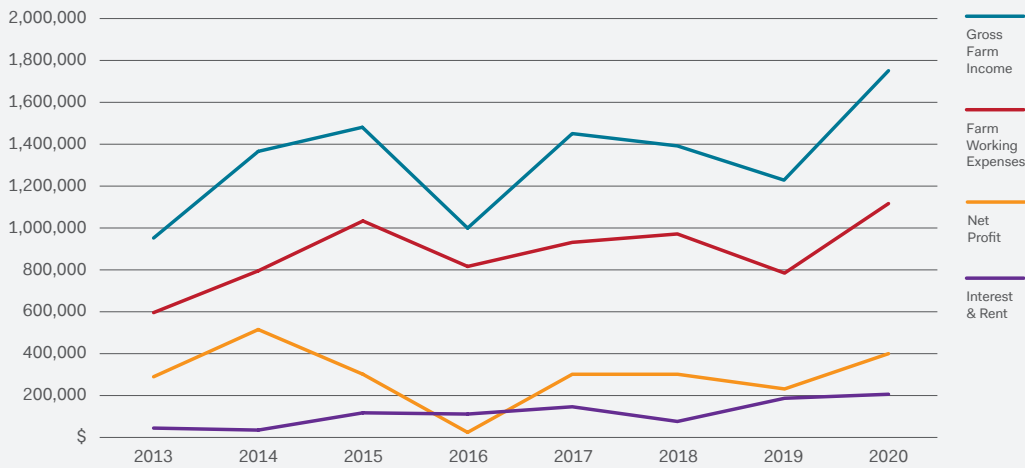
Survey

	Overall Average 2016	Overall Average 2017	Overall Average 2018	Overall Average 2019	Overall Average 2020	Benchmark Group 2020	Your Figures
Effective Grazing Area (ha) (EGA)	275	257	245	249	281	470	
Average Cows Milked (ACM)	973	853	850	851	980	1,570	
ACM/EGA	3.5	3.3	3.4	3.4	3.5	3.5	
Milk Revenue	\$782,942	\$1,074,876	\$1,168,332	\$1,015,065	\$1,173,146	\$1,423,755	
Milk Solids Production (kg)	428,952	369,810	359,268	348,161	386,053	537,235	
Average Value of Milk Solid Sales (Kg)	\$1.84	\$2.80	\$3.23	\$3.11	\$3.22	\$2.87	
Milk Solid Revenue/ACM	\$817	\$1,228	\$1,373	\$1,280	\$1,356	\$1,245	
Milk Solid Revenue/EGA	\$2,848	\$3,970	\$4,703	\$4,319	\$4,805	\$4,447	
Milk Solids/ACM (kg)	443	433	425	412	417	400	
Milk Solids/EGA (kg)	1,540	1,400	1,453	1,405	1,470	1,411	
Milk Solids as a % of GFI	77.2%	82.6%	87.6%	85.9%	84.2%	81.4%	
Gross Farm Income (GFI)	\$1,073,149	\$1,304,223	\$1,359,856	\$1,200,894	\$1,403,400	\$1,753,619	
Farm Working Expenses (FWE)	\$953,107	\$889,171	\$1,009,563	\$867,856	\$928,325	\$1,114,957	
FWE as a % of GFI	95.8%	68.1%	74.1%	72.9%	66.9%	63.8%	
FWE/ACM	\$1,029	\$1,031	\$1,176	\$1,085	\$1,056	\$954	
FWE per kg of Milk Solids	\$2.22	\$2.40	\$2.81	\$2.49	\$2.40	\$2.08	
Wages/ACM	\$235	\$233	\$257	\$253	\$260	\$281	
Animal Health/ACM	\$72	\$87	\$93	\$82	\$84	\$77	
Livestock Improvement/ACM	\$39	\$45	\$59	\$53	\$44	\$40	
Stockfood/ACM	\$302	\$288	\$356	\$331	\$316	\$198	
R & M/ACM	\$26	\$31	\$31	\$30	\$27	\$19	
Vehicle Expenses & Fuel/ACM	\$40	\$51	\$58	\$60	\$52	\$59	
Dairy Shed Expenses/ACM	\$15	\$18	\$21	\$18	\$19	\$21	
Interest & Rent Paid	\$134,576	\$129,522	\$127,898	\$113,112	\$113,585	\$203,438	
Interest & Rent Paid as a % of GFI	12.5%	8.9%	8.8%	9.2%	7.2%	11.5%	
Interest & Rent Paid/Kg MS	\$0.31	\$0.31	\$0.33	\$0.36	\$0.27	\$0.39	
Net Farm Profit	(\$126,330)	\$240,706	\$217,771	\$188,143	\$328,343	\$399,934	
Net Farm Profit as a % of GFI	(14.3%)	19.2%	15.7%	15.1%	23.3%	22.7%	
Net Plant Purchases	\$54,081	\$46,524	\$47,321	\$28,223	\$30,153	\$16,764	
Personal Drawings (excl Allowances)	\$59,294	\$75,103	\$83,127	\$77,516	\$84,361	\$100,490	
Est Total Farm Capital (TFC)	\$2,141,357	\$2,692,037	\$2,473,813	\$2,070,158	\$2,283,333	\$1,549,000	
Est TFC per kg Milk Solids	\$5.53	\$6.07	\$6.90	\$6.25	\$6.33	\$3.15	
Est Interest on TFC	0.6%	9.6%	10.0%	9.6%	17.0%	34.1%	
Total Term Debt	\$1,676,774	\$1,619,885	\$1,691,146	\$1,270,686	\$1,534,100	\$1,538,757	
Term Debt as % of TFC	65.9%	53.6%	72.1%	69.3%	75.5%	91.0%	
GFI to Plant Ownership Ratio	4.8	6.9	7.2	7.8	8.8	9.5	
Earnings Before Interest, Rent & Tax (EBIT)	\$16,669	\$370,228	\$345,669	\$301,255	\$441,928	\$603,372	
EBIT/ACM	\$9	\$427	\$410	\$381	\$500	\$503	
EBIT/EGA	\$42	\$1,441	\$1,421	\$1,278	\$1,773	\$1,775	
EBIT/kg Milk Solids	\$0.03	\$0.99	\$0.97	\$0.93	\$1.19	\$1.18	
Net Profit / kg Milk Solids	(\$0.30)	\$0.68	\$0.64	\$0.57	\$0.91	\$0.79	
Total Cost of Production/KG MS	\$2.72	\$2.84	\$3.13	\$3.10	\$2.89	\$2.67	
Milk solid Margin/Kg MS	(0.89)	(0.54)	0.10	0.02	0.33	0.19	
"Misery Index"	109%	77%	83%	82%	74%	75%	

Average GFI, FWE, Interest + Rent & Net Profit 2013–2020



Benchmark GFI, FWE, Interest + Rent & Net Profit 2013–2020



Interest/Rent paid per kg/ms

\$0.27 overall
\$0.39 top 10%

Farm working expenses per kg/ms

\$2.40 overall
\$2.08 top 10%

Glossary

SU	Stock Units (or Ewe Equivalents).
GFI	Gross Farm Income.
FWE	Farm Working Expenses.
Personal Drawings (excluding allowances)	Personal Drawings but excluding: <ul style="list-style-type: none">Life AssurancePersonal InsurancesSuperannuationTaxationPersonal Insurance, Electricity & Car AllowancesSchool FeesHealth & Sickness InsurancePersonal ACC Levies.
Net Plant Purchases	Gross Capital Plant Purchases less Capital Plant Sales/Trade-ins.
TFC	Estimated Total Farm Capital Employed in the farming operation in the form of Land, Stock & All Plant (+ Dairy Shares where relevant).
EGA	Effective Grazing or Milking Area (in hectares).
ACM	Average Cows Milked (usually taken at or around early to mid January each year).
MS (kg)	Milk Solids (kg).
EBIT	Gross Earnings before interest and tax = Gross Farm Income less all expenses except Interest and/or Rent and Income Tax.
Net Farm Profit	True Net Farm Profit (calculated after allowing for and adjusting for any livestock number and class number changes and being reflected at the current year's Herd Scheme Values and after deducting FWE, interest, rent and depreciation).
GFI to Plant Ownership	The relationship of the Gross Farm Income to the book value of plant at year's end. The lower the number the more the exercise has excess plant or insufficient GFI or a combination of the two.
Total Term Debt	Includes all external debt and family debt. Some family debt may involve a low to nil interest cost.
Interest Earned on Total Farm Capital Employed (TFC)	The net farm profit plus added back interest and/or rent paid less a wages of management figure for one or both spouses as is appropriate, divided by the estimated value of the total assets employed re land, buildings, stock and plant. Where land is rented from external parties its value in general is not included in the TFC.
Farm Sector Groups	It is fair comment that some farms could fit either in whole or in part into several different farm sector groups but this would generally only apply to about 5% of the total. The comment applies to several downlands and several hill country farms.
'Misery Index'	The sum of the FWE to GFI ratio and the interest and/or rent paid to GFI ratio. Where the sum is above 80% unless the scale is significant it almost invariably means trouble because it could well mean that more than one key benchmark is being broken at any one point in time.
BG	Benchmark Group.



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