How resilient is your farm business?

Analysis of Canterbury Dairy Farms in DairyBase 2013-2023

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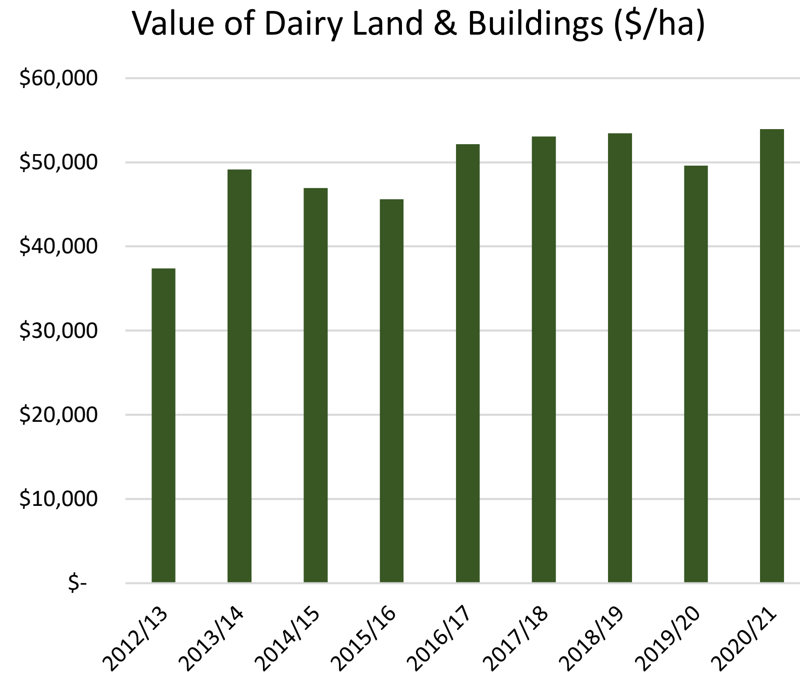
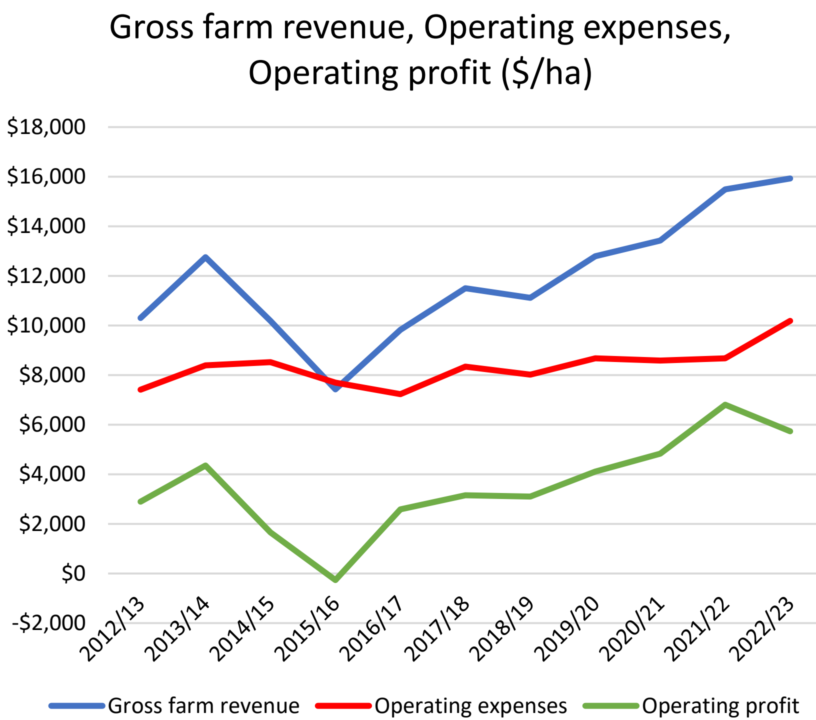
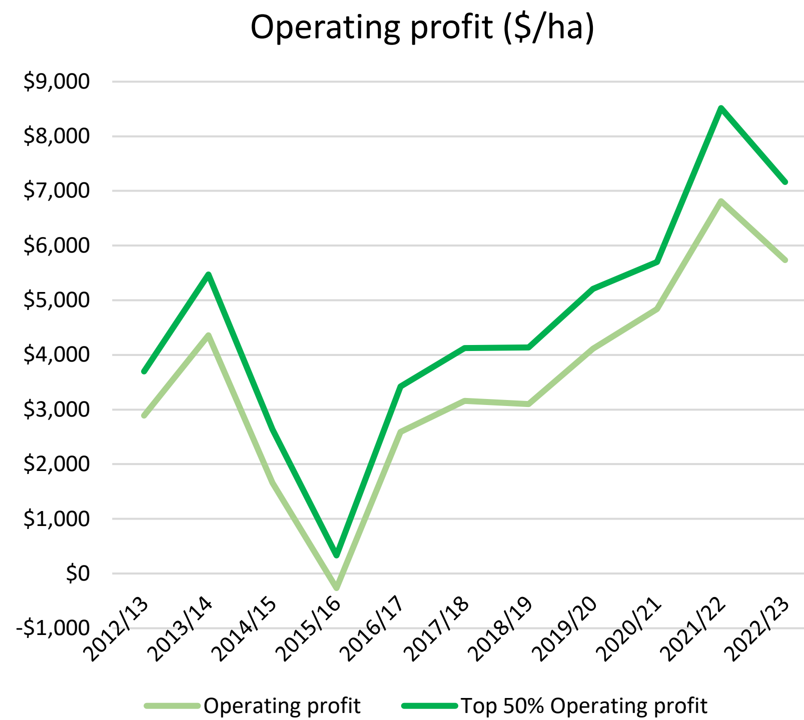
DairyNZ



- Significant debt has been repaid since 2019.
- Debt reduction is a good option for most farm businesses leading to increased financial resilience.
- Dairy land has only increased marginally since 2014, based on 90 farms in DairyBase.
- Land value generally increases over long periods of time however, it is risky to budget on capital gain in the short term. Therefore, it is essential to focus on optimising profit and achieving a high return on assets (RoA), above the cost of borrowing.





- Gross farm revenue has risen strongly since 2016, well ahead of operating expenses, resulting in higher operating profit.
- This trend is forecast to reverse in the 2022/23 season due to increasing operating expenses.
- The top 50% operating profit group will likely follow this trend, but they will have increased capacity to manage volatility.

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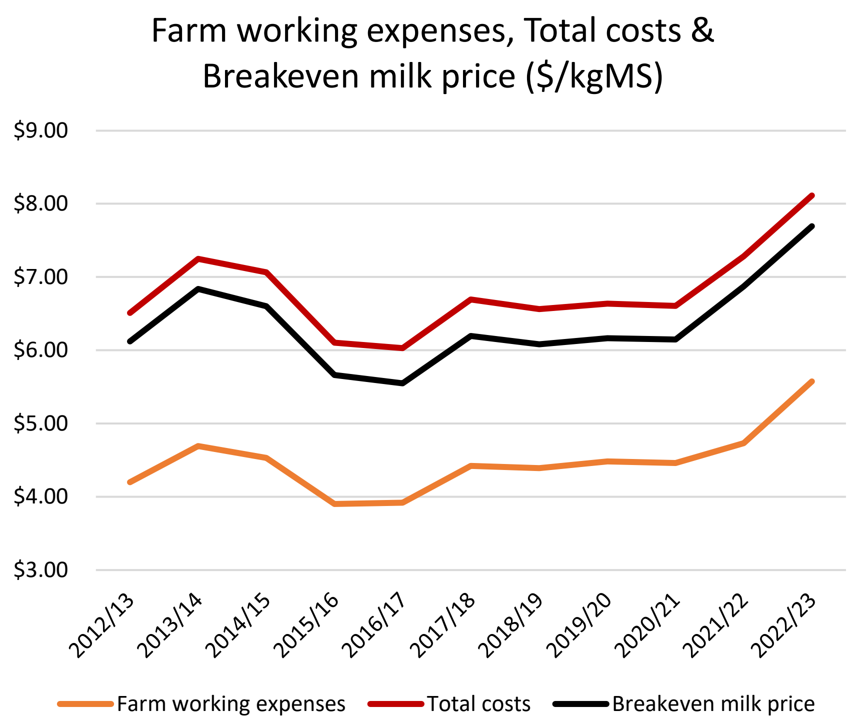
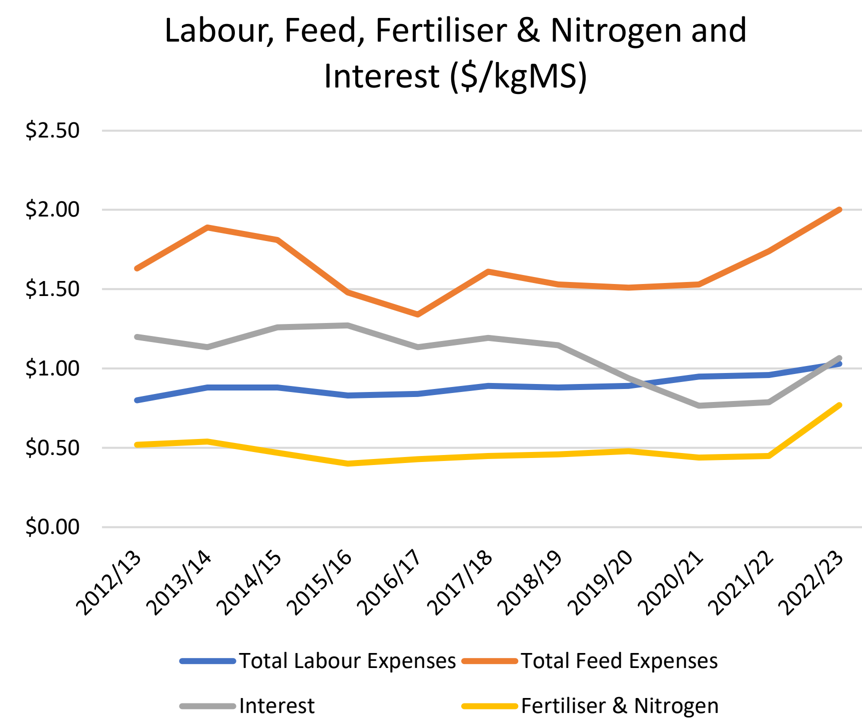
Trends in costs and breakeven milk price

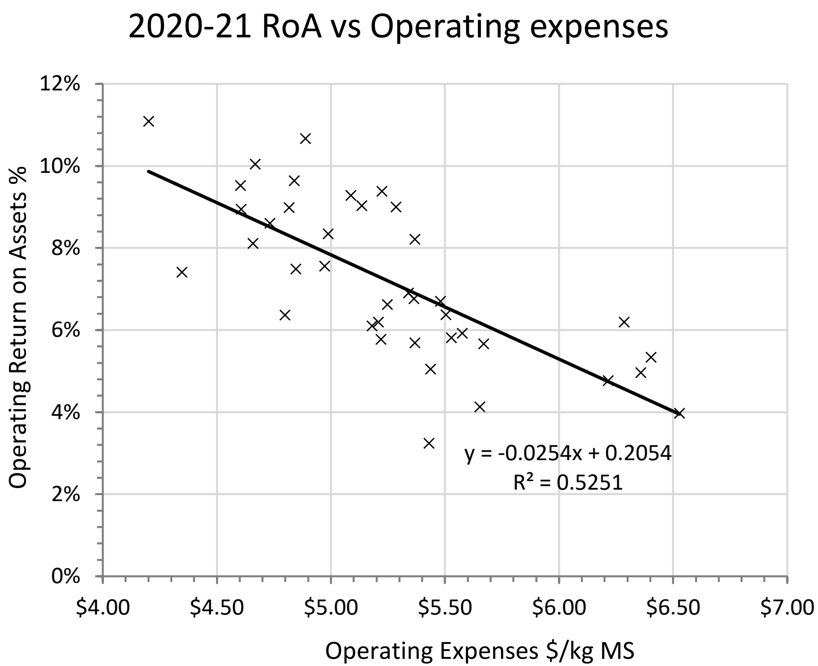
	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22*	2022/23*
Farm working expenses	$ 4.20	$ 4.69	$ 4.53	$ 3.90	$ 3.92	$ 4.42	$ 4.39	$ 4.48	$ 4.46	$ 4.73	$ 5.57
Depreciation	$ 0.48	$ 0.48	$ 0.51	$ 0.53	$ 0.51	$ 0.51	$ 0.48	$ 0.48	$ 0.44	$ 0.46	$ 0.46
Interest & rent	$ 1.27	$ 1.17	$ 1.32	$ 1.34	$ 1.19	$ 1.24	$ 1.20	$ 0.99	$ 0.82	$ 0.85	$ 1.13
Tax	$ 0.22	$ 0.40	$ 0.09	$ 0.01	$ 0.10	$ 0.19	$ 0.19	$ 0.35	$ 0.55	$ 0.88	$ 0.61
Drawings	$ 0.34	$ 0.51	$ 0.61	$ 0.32	$ 0.30	$ 0.33	$ 0.30	$ 0.33	$ 0.33	$ 0.36	$ 0.35
Total costs	**$ 6.51**	**$ 7.25**	**$ 7.06**	**$ 6.10**	**$ 6.03**	**$ 6.69**	**$ 6.56**	**$ 6.64**	**$ 6.61**	**$ 7.28**	**$ 8.11**
Less stock income	$ 0.39	$ 0.41	$ 0.46	$ 0.44	$ 0.48	$ 0.50	$ 0.48	$ 0.47	$ 0.46	$ 0.41	$ 0.42
Breakeven milk price	**$ 6.12**	**$ 6.84**	**$ 6.60**	**$ 5.66**	**$ 5.55**	**$ 6.19**	**$ 6.08**	**$ 6.17**	**$ 6.15**	**$ 6.87**	**$ 7.69**
Net Milk Sales	$ 6.33	$ 7.72	$ 5.73	$ 3.95	$ 5.75	$ 6.54	$ 6.43	$ 7.01	$ 7.40	$ 9.14	$ 9.27

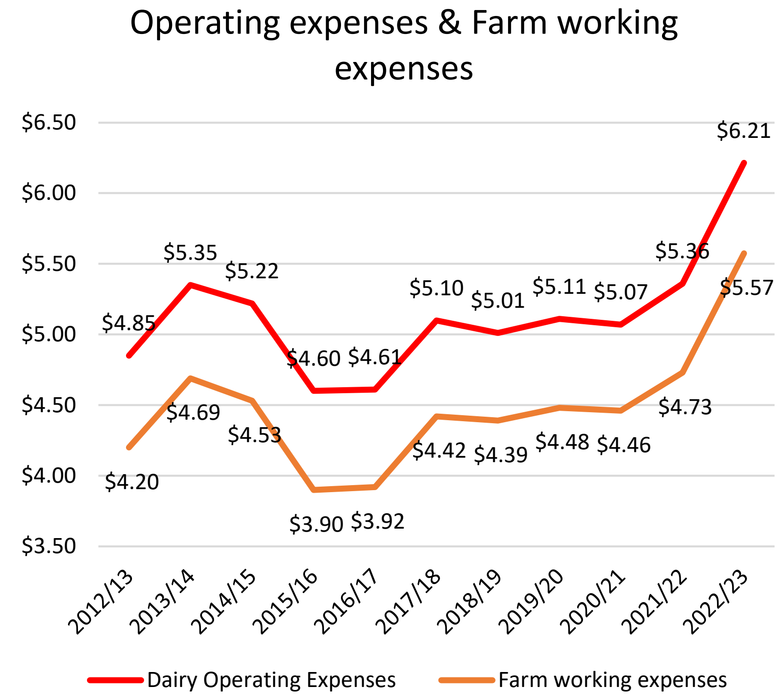
**estimates*

- Farm working expenses are estimated to increase by $1.11/kgMS from 2020/21 to 2022/23.
- Interest costs are increasing significantly due to rising interest rates, even allowing for ongoing debt reduction.
- Depreciation has averaged $0.46/kgMS and is used as a proxy for ‘maintenance capital expenditure’. It has been relatively consistent over time. However, as infrastructure ages (e.g. irrigation systems) this may not be enough of an allowance to cover actual capital expenditure requirements over the next 5 to 10 years.
- The average breakeven milk price was $6.15 for the 9 years 2013 to 2021. The estimate for the 2023/23 is 25% higher at $7.69/kgMS.

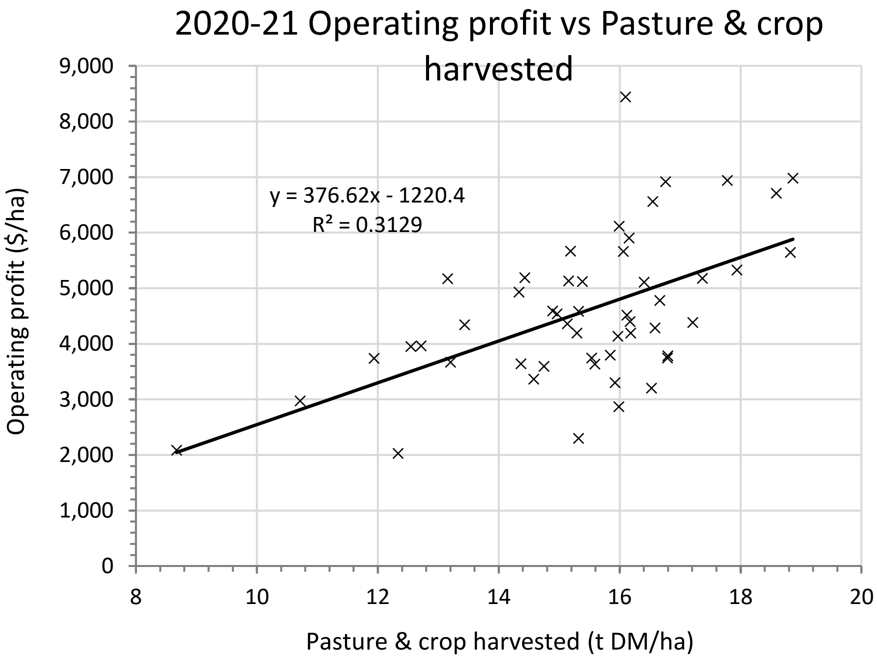

Farm working expenses, Total costs & Breakeven milk price ($/kgMS)
$9.00
$8.00
$7.00
$6.00
$5.00
$4.00
$3.00
2012/13
2013/14
2014/15
2015/16
2016/17
2017/18
2018/19
2019/20
2020/21
2021/22
2022/23
Farm working expenses
Total costs
Breakeven milk price

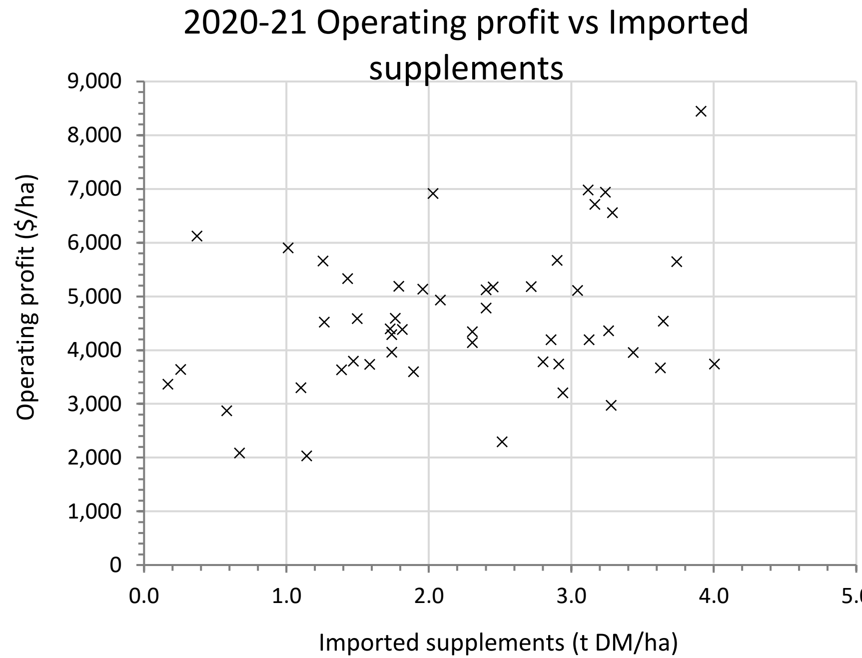

Labour, Feed, Fertiliser & Nitrogen and Interest ($/kgMS)
$2.50
$2.00
$1.50
$1.00
$0.50
$0.00
2012/13
2013/14
2014/15
2015/16
2016/17
2017/18
2018/19
2019/20
2020/21
2021/22
2022/23
Total Labour Expenses
Total Feed Expenses
Interest
Fertiliser & Nitrogen





- Farm businesses that generate RoA above interest rate make money off every dollar borrowed.
- If Operating expenses reduce by $0.50/kg MS, RoA increases by 1.3%
- Businesses based on commodities must focus on low unit cost of production i.e. Operating expenses/kgMS and Farm working expenses/kgMS.
- Operating expenses are best used when benchmarking.
- Farm working expenses are best used for cash budgeting.





- Pasture & crop harvested is still an important driver of operating profit. 1 ton of extra pasture harvest = an extra $380 of profit/ha.
- Top pasture managers have a relentless focus on pre-grazing cover, post grazing residuals, average pasture cover & rotation length.
- There is no significant relationship between Operating profit/ha and Imported supplements/ha.
- Generating the same profit with less inputs will mean inflation has less of an effect on increasing costs.
- DairyNZ supplement calculator shows: autumn use of supplements can be profitable with the following assumptions: at $9.00/kg MS and target residuals met (saved pasture used to increase rotation length); when supplement prices are at or below $450/t PKE/blends; grain $650/t and pasture silage $400/t. Baleage marginal at $500/t.

Summary

- Focus on generating RoA above the interest rate.
- The 2022/23 forecast profit is still looking solid despite very high inflation. However, forecasts cannot be relied upon – be prepared for a lower milk price.
- Keep paying off debt.
- Maintain a relentless focus on cashflow monitoring and pasture management.
- Review the 5-year capital expenditure requirements to maintain farm infrastructure.
- Review your autumn supplement decisions. They can be profitable if you don’t overpay or leave high grazing residuals.
- Benchmark your business using DairyBase or your Consultant/Accountants benchmarking system, so you know your potential
  - Return on assets
  - Operating profit
  - Operating expenses
  - Farm working expenses
  - Pasture & crop harvested