Feasibility of innovative sharemilking arrangements

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Abstract.

Sharemilking is an entry point for new dairy producers in the New Zealand industry, and traditionally most sharemilking arrangements have been a 50/50 arrangement. These structures are relatively rigid in the share of milk income and apportionment of operating costs between the land owner and sharemilker. With milk price volatility rising these types of arrangements increase the financial and business risks, particularly for sharemilkers. These risks are further compounded because the value of the primary asset owned by sharemilkers, cows, declines to a much greater extent than land with a fall in milk price, reducing total wealth. We tested the hypothesis that flexible sharemilking arrangements will reduce the variability of income of sharemilkers, making for a sustainable income pattern.

A synthesised dairy farm system is used to compare an innovative arrangement where milk revenue is divided based on milk payout price, rather than simply on contribution. Stochasticity is incorporated into the model to capture milk price volatility through the use of a stochastic price simulator. This approach allows decision rules to be built into the model based on revenue sharing to reduce income variability.

The identified innovative structures could be used by new entrants, sharemilkers, and land owners to encourage alternative forms of sharemilking revenue sharing, and provide information and education to the dairy industry. These alternative structures could be beneficial to industry sustainability, given that the dairy industry contributes a significant amount to New Zealand’s economy and export earnings, and price volatility is expected to continue to increase.