GRAIN & GRAZE 2 CASE STUDY

To lease or not to lease?

Written by Nic McGregor, Farm Consultant, Agvise

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Profile

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Farmers looking to expand their operations are faced with many questions prior to making a decision to lease more land. Is it viable and how will it affect the profit/loss of the farming business?

As part of the Grain and Graze 2 project, a scenario to lease an additional 1,500 arable hectares in the eastern wheatbelt was analysed by Agvise Farm Consultant, Nic McGregor.

The analysis was undertaken using the @Risk computer program (an add-on to Microsoft Excel) which provide consultants with the opportunity to measure risk by calculating how often an event occurs, and how large the impact of that event is likely to be.

In this exercise, Nic looked at how often the business would experience a profit/loss by leasing additional land compared to continuing with normal operations, and how large this profit/loss would be.

Nic said experience shows us, it is the size of the loss which impacts on the financial sustainability of a farming business.

“The analysis showed that in both scenarios (with and without leasing) the farm operating profit would experience a loss in 2 out of 10 years, and that the inclusion of additional lease land increased profit/loss variability. The variability of profits in the top 10% of years increased from $754K to $1.098M; while losses also increased in the bottom 10% of years from $272K to $378K” Nic said.

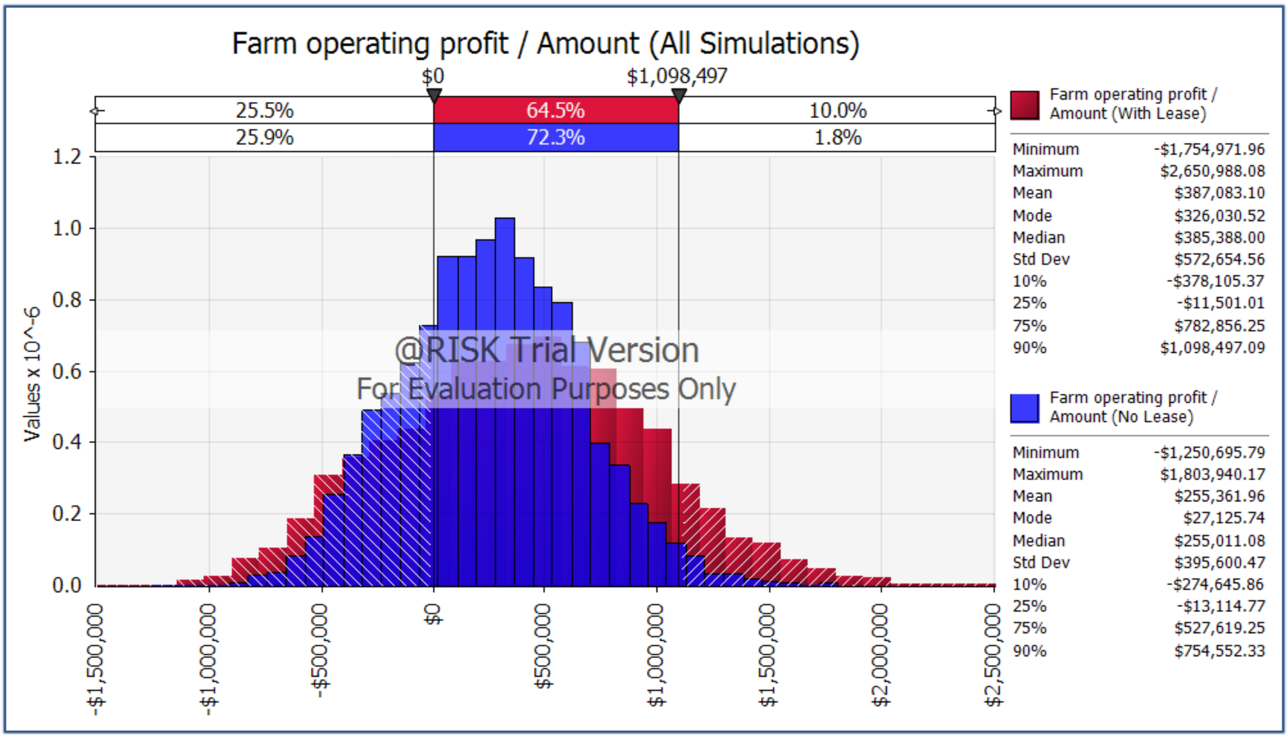
"In looking at the diagram, the increased profit variability can be seen by the 'flatter' distribution and 'fatter' tails. Both scenarios had a similar breakeven point, and the additional leased land scenario showed a greater farm operating mean of $387k versus $255k, without the leased land.

"Therefore, if the farmer was willing to accept increased volatility of potential outcomes, the leased land scenario would return higher profit outcomes at a higher probability," he said.

"This confirms the concept of risk and reward." Nic said this analysis shows farmers should not make large business decisions based on the mean alone.

"They need to study the range of possible outcomes, and what these may mean for the farming business and their family, before they make an investment," said Nic.

The @Risk model helped Nic to match the change in business risk to the risk of the grower and their current business risk. For example in this scenario, Nic said the increased business risk would only be suitable for farmers with higher personal risk profiles, and/or a business which is able to absorb the losses through other farming operations or retained profits."



The Grain and Graze 2 Risk and Uncertainty project encourages farmers and consultants to look at the concept of risk and reward; and how farm business decisions can better reflect the risk profile of farmers and farm businesses.

Last year Nic participated in an @Risk training day hosted by Grain and Graze 2, along with a number of other consultants. @Risk is a computer program that provides consultants with the opportunity to analyse risk using a Monte Carlo simulation to calculate how often an event occurs, and how large the impact of that event will be.

If you are interested in finding out more about the @Risk program or who has access to the software, contact Grain and Graze Project Officer, Danielle England on 0429 676 077 or email danielle@planfarm.com.au.

Acknowledgments

Grain & Graze
Profit through knowledge

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