GRAIN & GRAZE 2 CASE STUDY

Presenting risk in a different way

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Profile

David McCarthy

Company: Farmanco

Position title: Farm Management Consultant

Location: Narrogin

A tight cropping and livestock lease - is it a business opportunity or too much risk to take on?

These were the questions Narrogin based Farmanco farm management consultant David McCarthy and one of his clients were asking at the start of the 2012 season.

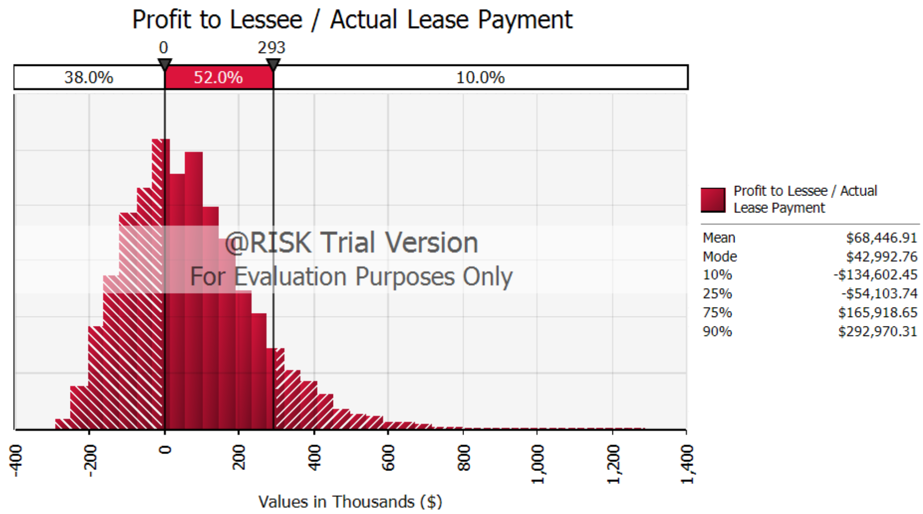
David prepared the normal business expansion analysis, including a sensitivity analysis, but also decided to run it through the @Risk computer program as a result of attending a Grain and Graze 2 workshop in December 2011.

"The profitability of the lease was on the break-even line, and it showed that in the sensitivity analysis," David said.

"The analysis of the proposal using the @Risk software showed the risk to the lessee was quite significant, along with the range of financial risks the lessee faced."

David said rather than presenting the usual assessment formula (average yield x average price = average income), @Risk allows farm business management consultants to present a distribution of different outcomes.

In this case, David presented graphically the farm profit after the lease payment. In other words, how often the farm business will generate an above zero return (after variable costs including interest and machinery costs). In this case, it would be 62% of the years. Or conversely, the leasee would be exposed to a negative income in 2 of 5 years (38%).



"The tails are the important things. If you look at the tails, the loss decreases steeply, but there is a long gain. So there is a higher probability of significant profits." David said.

David outlined that in particular, the negative tail end is the important end. It is the end that can generate serious financial pain. The farming business needs to assess how it can absorb such losses, should they eventuate, before it considers investing in such leasing arrangements.

Despite knowing it was a tight projection, the client chose to go ahead with the lease.

"It all boils down to the appetite of risk of the grower," Dave said.

"This scenario doesn't present a good business case, but the grower went ahead for other reasons."

David said the clients were fully informed going into the decision, and both analyses would have added value to the decision making process.

He felt the @Risk software provided more information for analysis as it gave a range of outcomes for different circumstances.

"Even though I'm used to reviewing sensitivity tables, I, like many others, absorb data faster in picture form, so a graph rather than a sensitivity table gives a clearer portrayal of the outcome."

"In future, we intend to help our clients further by educating them on how to use distribution graphs.It is a different and useful tool that could be really beneficial in communicating our recommendations to clients."

David was a part of a Grain and Graze 2 training day on @Risk in December 2011 for WA farm management consultants. The workshop introduced consultants to use of the @Risk software during whole farm analysis, and gave them some examples of how it may be used during the normal course of their businesses.

David was able to analyse the lease as a part of the 30 day trial he had taken up to undertake the training.

"The traditional approach to assessing risk is that you make the assumption that everything will be average, and investigate the differences using a sensitivity analysis," David said.

"By using @Risk and converting the risk to a distribution curve, it gives a much clearer picture of risk."

Acknowledgments

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