

Profitability and cost of production

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Abstract

To sustain profitability in the grains industry with a cost-price squeeze, a better understanding of variable cost of production amongst grain growers is essential. A recent survey investigated the variable production costs and marketing alternatives used by wheat producers in the Wimmera. The results indicated that many grain growers currently have a poor understanding of variable cost of production per tonne. Wimmera wheat growers with variable cost of production less than \$80/tonne were more likely to focus on variable cost identification compared with growers with variable costs in excess of \$80/tonne. Further investigation is needed to determine whether an increased understanding of variable cost of production has led to the reduction in these same costs. The survey also highlighted a link between grower identification of variable cost of production per tonne and the use of price risk management methods.

Key Words

Grain marketing, decision-making, risk management

Introduction

Australian agricultural producers regularly encounter both price and production uncertainty (O'Callaghan, 2005). In broad-acre cropping, there has been a strong focus by agricultural scientists, agribusiness representatives and growers to manage grain production by targeting yield. The same cannot be said for grain price (Young, 2006). There has been limited attention paid to the relationship between cost budgeting and targeting a realistic but profitable price (Williams and Schroder, 1999).

In order to manage price risk, it is critical to know the cost of producing a tonne of grain. An understanding of the variable costs necessary to produce, harvest and deliver grain to market can assist the grower in both grain pricing and agronomic decision-making. A survey of current grower knowledge of variable costs occurred early in 2006. The investigation aimed to develop an understanding of Wimmera wheat producers, their variable cost of production and yield and relate these to enterprise diversification, risk profile, marketing and pricing methods.

Method

A survey was mailed out to 400 wheat growers in the Wimmera district of Victoria using an existing Department of Primary Industries (DPI), Victoria grower database. The grower sample was focused on those Wimmera wheat growers who had participated in regular group meetings based on cropping performance criteria with the support of the DPI, Victoria. These groups had been calculating their variable cost of production over a number of seasons, based on a standard DPI format procedure called Crop Forecaster (Sudholz et al, 2005). This standardised accounting procedure minimised the bias of results that would be due to producers having different accounting methods. The survey questions related to the 2005 season.

Results

Fifty-one surveys were returned fully completed from a total mail-out of 400, representing a sample size of 13 per cent. In an attempt to gauge grower ability to identify variable cost of production per tonne, the information provided was compared to the wheat yield and variable cost of production per hectare for each survey returned. If the cost of production per hectare and average yield for 2005 correlated with the

cost of production per tonne, then it was deemed that the grower was able to identify variable cost of production per tonne.

Table 1. Grower identification of variable cost of production per tonne - wheat.

Variable	Grower with variable cost production wheat <\$80/mt	Grower with variable cost production wheat >\$80/mt
Growers able to identify variable cost of production per tonne – wheat	100%	16%

Table 2. Grower profiles: Variable cost of production for different variable cost per tonne ranges.

Variable	Grower with variable cost production <\$80/tonne	Grower with variable cost production wheat \$80-\$100/tonne	Grower with variable cost production wheat \$100-\$140/tonne
Growers surveyed	36%	36%	26%
Farm size average	1458ha	1274ha	1346ha
Wheat yield average	3.4 tonne/ha	2.9 tonne/ha	2.7 tonne/ha
Percentage of land to wheat	18%	28%	16%
Percentage of land to wool/livestock	21%	13%	14%
Decision-maker business risk attitude	Moderate risk taker	Neutral	Neutral - Moderate risk taker
Growers with >50% in wheat export pool	50%	44%	69%
Growers with >50% forward contracted	17%	0%	0%
Growers participating in grain hedging	22%	6%	8%

Growers with grain
marketing training

78%

39%

8%

Discussion

The survey results provide a snapshot of Wimmera wheat producing businesses in 2005. Growers with variable cost of production for wheat below \$80/tonne (low cost growers), tended to have larger farms, higher wheat yields and consider themselves to be greater risk takers than higher cost growers, or growers with variable cost of production for wheat in excess of \$80/tonne.

Participation in training on grain marketing was greater amongst low cost growers. Furthermore, this group had a higher rate of involvement in grain hedging activities. Low variable costs of production, together with an increased use of price risk management tools have the potential to provide more opportunities to target a realistic but profitable price per tonne, thereby reducing the adverse effects of price variability.

Highlighted by Table 1, is the result that 100 per cent of low cost growers were able to identify 2005 season wheat variable cost of production per tonne. This was not the case with higher cost growers, where the identification of variable cost of production per tonne was 16 per cent. With the majority of growers surveyed falling within the higher cost bracket (64%), this indicates that a large proportion of Wimmera wheat producers are currently unable to identify their variable cost of production for wheat.

In addressing a cost-price squeeze the options are to reduce costs, or increase price, or both. Grain growers who understand variable cost of production per tonne have the potential to reduce these same costs. The survey highlighted such a link although was unable to demonstrate the direct causation. Knowledge of variable cost of production per tonne also informs grain growers when setting price targets when using price risk management methods such as forward contracting and grain hedging.

Conclusion

This snapshot of Wimmera wheat growing businesses in 2005 has identified a link between grain growers being able to identify their variable cost of production per tonne and a reduction in these same costs. The nature of this link was not identified via the survey, however it identifies a potential area for further investigation. It also highlights an area in which future industry development may occur.

References

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