

**PROCEEDINGS OF THE AUSTRALIAN RANGELAND SOCIETY
BIENNIAL CONFERENCE**

Official publication of The Australian Rangeland Society

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Form of Reference

The reference for this article should be in this general form;
Author family name, initials (year). Title. *In*: Proceedings of the nth Australian Rangeland Society Biennial Conference. Pages. (Australian Rangeland Society: Australia).

For example:

Anderson, L., van Klinken, R. D., and Shepherd, D. (2008). Aerially surveying Mesquite (*Prosopis* spp.) in the Pilbara. *In*: 'A Climate of Change in the Rangelands. Proceedings of the 15th Australian Rangeland Society Biennial Conference'. (Ed. D. Orr) 4 pages. (Australian Rangeland Society: Australia).

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THE IMPACT OF CHANGING EQUITY LEVELS AND DEBT STRUCTURES ON WESTERN QUEENSLAND GRAZING PROPERTIES AND ASSOCIATED INVESTMENT ISSUES

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ABSTRACT

This study focussed on issues related to equity levels on grazing properties in western Queensland and also on the investment options used by producers over the period of the last half of the 1980's. With the favourable wool prices over much of the study period, debt levels across western Queensland grazing properties rose. Falling equity levels towards the end of the study were due mainly to a substantial drop in asset values. A significant rise in the proportion of funds loaned for land purchase was found and this was consistent with the 9% rise in average area over the period.

Data on the benefits of expanding property size indicated that producers purchasing additional blocks of grazing land could afford to pay up to 10-15% more and still be as well off as an individual with no existing land.

Just over half of the producers were able to invest funds in additional areas as opposed to investing back into the existing property.

INTRODUCTION

Background

Past decisions influence the scope for negotiating present and future conditions. The impact of these decisions are felt most strongly when decisions based on one plane of economic conditions and forecasts have to then be felt over a variety of economic conditions.

Changes in equity levels are relevant for all rural producers although they become most relevant when the business is to be sold. Also of interest are decisions made by producers during times when opportunity exists for investment either back into the industry or in other investments off the property.

An Australian Wool Corporation supported (funded) study of 62 grazing businesses was undertaken for the mitchell grass downs with data collected for the period 1985/86 to 1989/90. Nine of these producers had information for less than this period.

Scope and limitations

The aim of this paper was to cover three areas in relation to investment issues in grazing:

- (1) Examine changes in equity and its distribution over the study period.
- (2) Discuss investment decisions made by producers over the period.
- (3) Discuss the key factors influencing the price of grazing land in western Queensland.

A major strength of this study is the large sample sizes from three relatively homogeneous resource regions. The results should be reliable estimates for mitchell grass grazing areas in western Queensland.

The need to value assets, in particular land, in a thin market, is a limitation of this study as they are subject to author interpretation of limited objective information.

Another limitation of the study was that information was collected only up to the 1989/90 financial year, with the figures for 1990/91 financial year representing estimates from the 1989/90 results.

METHODS

The study area was stratified into three resource regions - Blackall mitchell grass (22 properties), Longreach mitchell grass (21 properties) and Julia Creek mitchell grass (19 properties). Calculated averages shown in this paper represented a weighted average for the three regions rather than being applicable to any one region in particular.

Data were used to study the trends in assets, debts and equity levels with specific reference to estimated changes in equity for the 1990/91 financial year. In addition to the magnitude of debt levels, changes in the composition of funds loaned for rural purposes were examined.

An analysis of the economic benefits of expanding holding size relative to buying a property if no country was previously owned was carried out. Only a small number of people expanded their holding relative to the number in each stratum. Investment options utilised by producers over the period were also addressed.

Where specified, a small property is one with up to about 8 000 dry sheep equivalents (dse's), a medium property is one with 8 000 to 12 000 dse's and a large holding is one with more than 12 000 dse's.

Components of assets and debts were expressed in terms of absolute dollars and then adjusted to sheep area values based on the following recommended long term stocking rate estimates:

(1)	Blackall mitchell grass downs	= 1.2 ha/dse
(2)	Longreach mitchell grass downs	= 1.4 ha/dse
(3)	Julia Creek mitchell grass downs	= 1.7 ha/dse

A sheep area was defined in this paper as the amount of land required to run a wether (dry sheep). It was based on the above long term recommended stocking rates which were based on Department of Lands estimates for the regions. These will provide a consistent basis for assessment of changes in assets, debts and equity and facilitate easy comparison with results from other regions.

All values were expressed in 1990 dollars.

RESULTS

Changes in debt and equity levels

(a) General trends

Shown in Table 1 are trends in total asset values, debt levels and equity. Total asset and land values basically followed the wool market with rises from 1985/86 to 1988/89, and falls in 1990 and 1991. While the trend in debt levels was generally upwards, seasonal factors did influence these levels from year to year. Despite the very favourable wool prices experienced over much of the period, average debt levels remained conservative relative to the value at the time of assets employed in the business.

With the significant change in wool market conditions during 1990, estimates were made of the effect of a decline in both land and sheep values on equity levels of grazing businesses. All 62 producers were included in this analysis.

The estimated fall in equity across the region from the peak in 1988/89 was over a third with equity ratios falling by 5-6% from that peak. Even though the peak in asset values was short-lived, equity levels in 1990/91 were estimated to be lower than those in 1985/86 in real terms (see Table 1).

There were no significant differences in debt levels and equity ratios between the three mitchell grass regions in western Queensland.

Table 1. Trends in asset values, debt levels and equity levels for western Queensland grazing properties (\$/sheep area).

Economic measure ^A	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91
Total assets (\$/sheep area) (A)	117	127	155	169	154	109
Total debts (\$/sheep area) (B)	13	14	12	16	16	16
Equity (\$/sheep area) (A-B)	104	113	143	153	138	93
Equity ratio (%)	88	88	91	91	89	85

A) The sample size of 53 was for the first year with the data from the other 9 businesses included during subsequent years.

ABARE (1991a) found that the average equity ratio for sheep properties throughout Australia was 86% in 1990/91 with the regional map suggesting that equity ratios for grazing businesses in the mitchell grass regions examined in this study were between 80 and 85%. This is similar to the equity levels found in this study.

Producers in financial difficulty

Changes in the wool market since 1990 have increased the vulnerability of wool growers because of a fall in asset values and the potential for rising debt levels due to significantly lower wool prices.

With falling interest rates and generally favourable seasonal conditions in 1990/91, it is likely that debt levels remained relatively unchanged during the 1990/91 financial year with land and sheep values adjusted according to 1991 estimates.

Shown in Fig. 1 is the distribution of equity ratios for both 1989 and estimates for 1990/91. Several noteworthy points which were based on Newman (1991) emerged from this analysis:

- (1) For 1990/91 it was estimated that 30% of producers have little or no debt (equity ratio in excess of 95%); 30% have low to moderate debt levels (between 85 and 95% equity ratios) and; 40% have significant to high debt levels (less than 85% equity ratio) for their grazing businesses.
- (2) Significant falls in asset values have an exponentially greater effect on individual producers with lower initial equity levels.
- (3) About two-thirds were above the average equity figure and one-third below.
- (4) About a quarter of the grazing businesses had equity ratios below 70% in 1991 with 10% perceived to be in considerable financial risk.

Producers who expanded over the period are likely to be in a better position to negotiate the industry difficulties than those who have large debts for other reasons such as drought, purchases of machinery or buying out family members within the existing business structure.

Based on projections in Newman (1992), it was estimated that farm cash income for a typical property in the Longreach area would be around \$10 000 in 1990/91 and -\$30 000 for the 1991/92 financial year.

With wool prices still low, it is anticipated that more producers will fall into the 'at risk' category despite the lower interest rates. In addition, there is increased vulnerability to adverse seasonal conditions. The extent of these will depend largely on trends in wool prices.

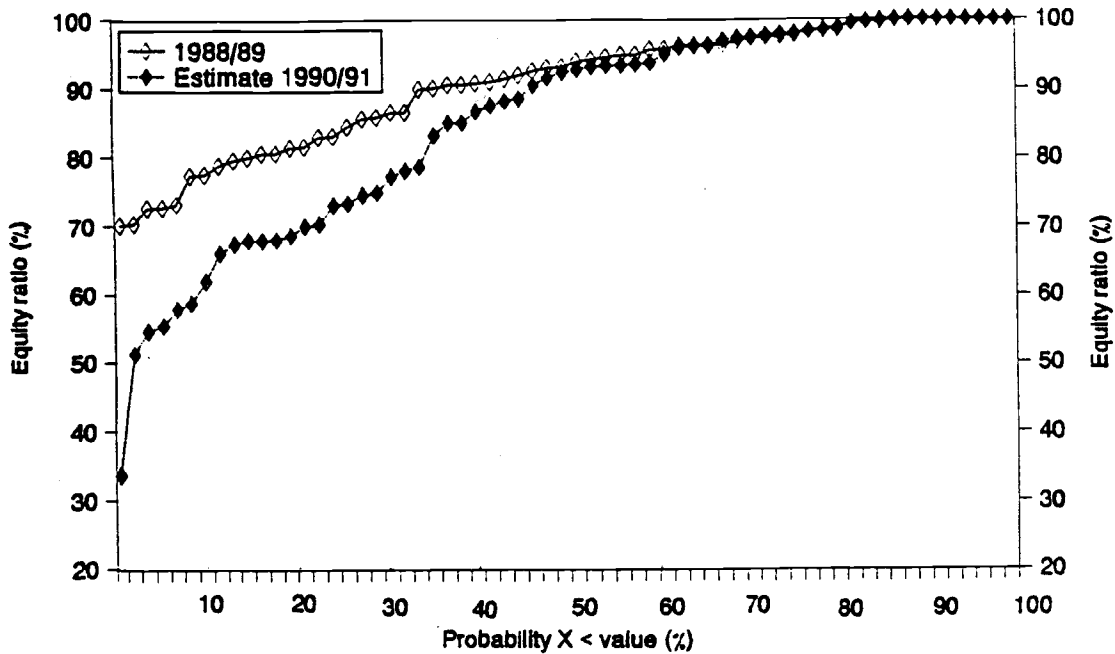


Figure 1. Distribution of equity ratios for 1988/89 and estimated 1990/91

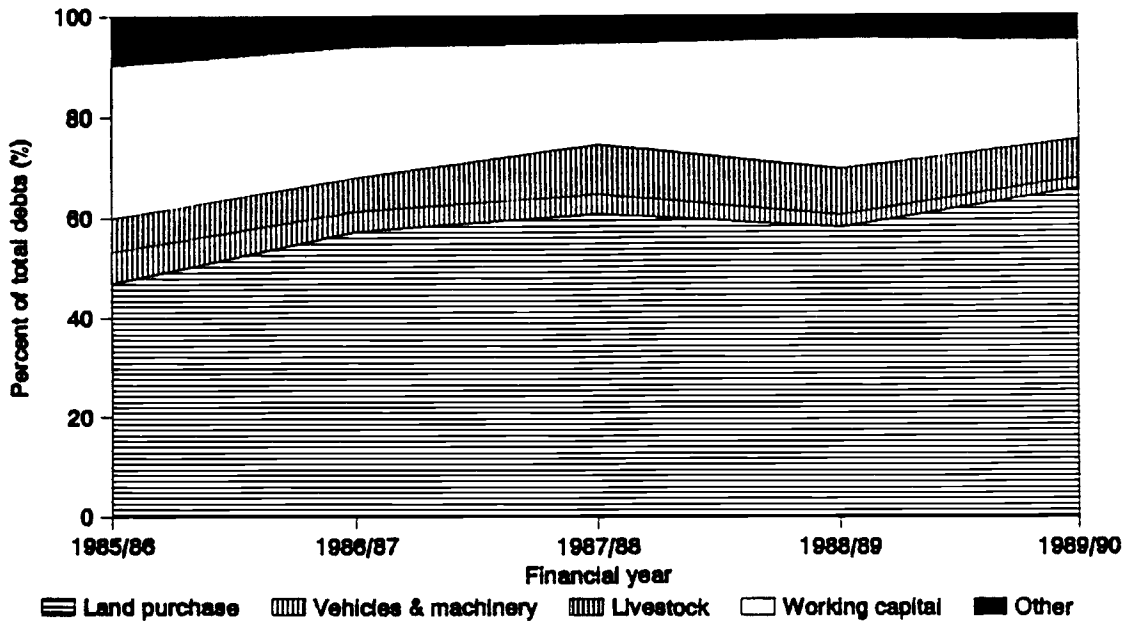


Figure 2. Changes in the purpose of debts for western Queensland grazing properties

Changes in purpose of debts

Changes in debt composition over time are shown in Figure 2. Working capital requirements after the 1988 drought were a contributing factor to the increase in debt over that period but the continuation of this trend in 1990 was due to expansion of property size by some producers.

There was an upward movement in the proportion of debts incurred for land purchase with an increase from 48% to 65% over the period. Average property size in the survey increased by about 9% over the period with the majority of this being financed from borrowed funds.

Advantages of expansion of property size

Economies of size existed for western Queensland grazing properties. These depended mainly on fuller utilisation of family labour with economies of size for cash costs limited (see Newman 1992). It is likely that producers who are expanding their property size by purchasing a block nearby are able to effectively pay a higher price than a person who is new to the industry and still be in a better financial position because of the potential for larger businesses to spread their overhead costs relative to smaller businesses. As one producer said: "A 5 pound per acre property was worth one pound more to the bloke next door than another buyer". The results of this analysis are shown in Table 2 below:

Table 2. Extra benefits associated with purchase for expansion relative to purchase of first property.

Extra benefits	Combined mitchell grass		
Number in sample	7		
Extra land as % of initial area	53.6%		
Extra cash benefits:	\$/ha	\$/sheep area	
- reduction cash costs	0.56	0.83	
- reduction capital costs	0.57	0.83	
Extra debt that can be serviced:			
- reduction cash costs	\$29 865		
- reduction capital costs	\$29 906		
Extra price that could be paid for land and still be as well off:	\$/ha	\$/sheep area	% of value
- reduction cash costs	3.19	4.69	5.70
- reduction capital costs	3.19	4.70	5.70
- total	6.38	9.39	11.40

Interest rates were assumed to be 12% with the criteria for ability to service debt being repayment (principle and interest) of the extra debt over ten years.

From the figures in Table 2, the estimated extra price that could be paid through the reduction in running costs was about 6% of the value, while for estimated capital costs, it was about 6%. However, large differences in these ratios existed between individual properties.

Overall, this component of the study showed that producers purchasing additional blocks of land in the region can afford to pay up to 10-15% (\$1.50 to \$2.25 per dry sheep equivalent) more than an individual who does not already own grazing land and still be better off. This was based on the extra land purchased being equivalent to a small holding in each region with most purchasing producers increasing from a medium to a large holding relative to other producers in the region.

Options for investment used by producers in the study

It was of interest to establish investment options utilised by producers over the five year period. Included as an investment option was the situation where a producer used funds to invest back into the property, pay debts, or to mitigate against drought. These were all grouped under the category 'back into the property'.

Only about 20% of small producers had significant off-property interests and few of these resulted directly from returns generated over the five years but were a product of time in the industry. About 75% of both medium sized and larger producers were able to generate returns sufficient to either consolidate or start making off-property investments. Of the estimated 40% of producers with less than 85% equity, none had significant off-property investments which were unencumbered. The amount of off-property investments was in favour of those with lower debts. This is to be expected and it does serve to highlight the disparity of misfortune as a result of the wool market downturn.

Summarised in Table 3 below are the main categories of investment options and the proportion of producers who undertook each.

Table 3. Investment options utilised by producers in western Queensland from 1985/86 to 1989/90.

Type of investment	Number of respondents	% of total
Back into property (e.g. debt repayment, improvements)	28	45%
Purchase extra grazing land	9.5	15%
Borrowed funds for off-property interests	8.5	14%
Other full equity investments and combinations of several investments (e.g. shares, house)	16	26%
Totals	62	100%

Factors influencing the price paid for grazing land in Western Queensland

Questions often asked in the region relate to the main influences on land values and what is in fact a fair price to pay for grazing land. Some of the influences on the price of grazing land are detailed below:

- (1) Current and expected wool and, to a lesser extent cattle markets.
- (2) Scope for economies of size. Producers who are expanding into an additional property are willing and able to pay more for a property than someone who is new to the industry.
- (3) Availability of feed. It was estimated that the value of agistment from a property purchased during a dry period is worth a once-off benefit of \$5 per sheep area or \$30 per beast area or about \$1.50 per acre.
- (4) The value placed on acquisition of assets which are consistent with the long term interests of the buyer.
- (5) The trade-off between higher returns to capital on more isolated properties which are lower in value and improved capital gain potential through purchasing more sought-after country in a favourable location.
- (6) Perceptions of productivity and quality of land for wool production, in particular.
- (7) Interest rates.

Data dating back to the late 1960's from grazing properties in the Julia Creek mitchell grass region indicate that the long term real return on capital from a well-managed property is in the order of 5% - about 40% of the long term average bank interest rate or similar to the net rental return from housing in the Brisbane Metropolitan area.

Potential for capital gain is dictated by timing of sale and purchase and there is no guarantee of real capital gain in the long term. Recent economic conditions serve to highlight the potentially volatile nature of rural asset values.

CONCLUSIONS

At the time of writing, preliminary indications are that rural land values in western Queensland are holding up better than expected. This is due in part to a general perception that it is a good time to purchase property in western Queensland.

Despite the favourable wool prices over much of the study period, debt levels across the region did not rise as much as expected with falling equity levels due mainly to a substantial drop in asset values. Equity estimates for 1990/91 were found to be similar to the ABARE average for the region.

It was estimated that equity has fallen by at least a third since the peak in 1988/89 and that current equity levels are lower in real terms than for 1985/86. About 60% of producers were estimated to have greater than 85% equity in their businesses but 25% have less than 70% equity ('at risk') and 10% are under considerable financial pressure.

A significant rise in the proportion of funds loaned for land purchase was found and this was consistent with the 9% rise in average area over the period.

Data on the benefits of expanding property size indicated that producers purchasing additional blocks of grazing land could afford to pay up to 10-15% more and still be better off than an individual with no existing land.

Just over half of producers were able to invest funds in areas additional to simply investing back into the existing property. However, only 20% of small producers were able to do this, while 75% of medium and large producers were able to invest elsewhere. In addition, no producers with less than 80% equity had potential access to significant unencumbered off-property investments.

REFERENCES

- Australian Bureau of Agriculture and Resource Economics 1991a. Regional financial performance of broadacre farms, Agriculture and Resources Quarterly, Vol 4, No. 4.
- Australian Bureau of Agriculture and Resource Economics 1991b. Farm debt: developments in broadacre agriculture, Agriculture and Resources Quarterly, Vol 3, No. 3.
- Australian Bureau of Agriculture and Resource Economics 1991c. Impact of alternative wool prices in 1992-93 on regional incomes, Agriculture and Resources Quarterly, Vol 1, No. 1.
- Newman, P.A. 1991. Interim report - An analysis of equity levels of graziers in central west and north west Queensland. Miscellaneous paper, Economic Services Branch, QDPI.
- Newman, P.A. 1992. Profitability of grazing properties on the combined mitchell grass regions, Report on AWC project DAQ37