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THE EFFECT OF DECLINING WOOL PRICES, WHEAT QUOTAS AND DEBT RECONSTRUCTION ON THE FINANCIAL VIABILITY OF AUSTRALIAN FARMERS

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An examination of the decline in net farm income between 1966-67 and 1969-70 indicates that in the three major zones the following size groups will be non-viable—(1) In the High Rainfall Zone, farms with less than 2,000 and more than 10,000 sheep, comprising 85 per cent of farms in the Zone. (2) In the Wheat Sheep Zone, farms with less than 1,000 sheep, comprising 56 per cent of farms. (3) In the Pastoral Zone, farms with less than 20,000 sheep, comprising 98 per cent of farms. This situation could be alleviated to some extent by extending the period of debt repayment from the present average period of 7 years to a period of 20 to 30 years.

1 INTRODUCTION

Despite rising costs and falling prices for wool and wheat, farm incomes in the early and mid 1960's increased¹ (tables 1, 2, and 3). But these increases were only achieved by investing additional capital in livestock, plant and machinery and other structural improvements which resulted in increased borrowing by graziers. It has been suggested that, with the large decline in wool prices and the increase in debt and interest payments which graziers must now make, many holdings are no longer economically viable.

In the long term a farm can only be considered economically viable if it is capable of paying for the cost of all of the resources used in each year from the value of the gross output it produces. In addition to the annual operating costs, interest and debt repayments must be met and provision must be made for the depreciation of assets from each year's gross revenue. Economic viability can be assessed by establishing the Residual Income. In any one year,

$$\text{Residual Income} = \text{Gross revenue} - \text{cash costs} - \text{depreciation} - \text{interest paid} - \text{debt repayment} - \text{additional capital investment required.}$$

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¹ Glau, T. E. "The Cost Price Squeeze on Australian Farm Income." Paper presented to the *Australian and New Zealand Conference of Economists*, Melbourne, May, 1970.

REVIEW OF MARKETING AND AGRICULTURAL ECONOMICS

The surveys of the Australian sheep industry carried out by the Bureau of Agricultural Economics can be used as a basis for estimating the Residual Incomes of Australian graziers. In these surveys average Net Farm Income is calculated for farms of different sizes in each of the three Australian grazing zones. Net Farm Income is defined as:

Gross Revenue — depreciation — cash costs (including an allowance for family labour but excluding the operator)

TABLE 1

Mean Real Net Farm Incomes per Property in the Sheep Industry

Year ending 30th June	High rainfall sheep zone	Wheat and sheep zone	Pastoral zone
1958	1,499	1,316	2,669
1959	1,035	2,029	3,943
1960	1,803	2,217	6,219
1961	1,671	2,648	4,557
1962	1,647	2,570	5,055
1963	2,175	3,222	6,782
1964	3,309	3,344	9,997
1965	2,404	3,477	3,180
1966	2,433	2,149	-1,390
1967	2,753	3,724	4,370

Source: Glau, T. E. Paper presented to the Australian and New Zealand Conference of Economists (Melbourne, May, 1970).

TABLE 2

Increase in Livestock Numbers and Crop Areas in Australia's Grazing Zones, 1958-9 to 1966-7

Percentage Increase (+) or Decrease (-)

ZONE

	Pastoral	Wheat and sheep	High rainfall
Sheep numbers	-17	+ 7	+ 33
Cattle numbers	-11	+ 41	+ 59
Area of wheat sown	+ 93	..

TABLE 3

Average Wool Prices for Australian Greasy Wool

Year ending 30th June	Cents per lb greasy wool
1958	52.04
1959	40.47
1960	48.15
1961	43.38
1962	45.11
1963	49.13
1964	58.08
1965	47.83
1966	50.08
1967	47.38
1968	41.75
1969	44.67
1970	37.55

Source: The National Council of Wool Selling Brokers of Australia, *News Bulletin*, 13th July, 1970.

2 THE PRESENT SITUATION

It is impossible to assess accurately the decline in net farm income which will occur as a result of lower wool and wheat prices and wheat quotas, as farmers can still offset declining prices by increasing the number of livestock carried and by substituting cattle for sheep. However, in July, 1970, the Bureau of Agricultural Economics estimated that the decline in woolgrowers' incomes between 1966-7 and 1969-70 would be within the following ranges for the three grazing zones:²

High Rainfall Sheep Zone	5 to 18 per cent
Wheat and Sheep Zone	34 to 45 per cent
Pastoral Zone	50 to 55 per cent
Pastoral Zone (excluding Queensland) ..	20 to 40 per cent

One method of calculating the expected net farm incomes in 1969-70 is to reduce the 1966-7 net farm incomes by the extremes of the ranges shown above. The results of this calculation for farms of different sizes, in the three grazing zones surveyed by the B.A.E., are shown in table 4.

The amounts of interest paid by graziers in 1966-7 were recorded by the B.A.E.³ The Reserve Bank has published a review of rates of interest

² Bureau of Agricultural Economics, "Preliminary Estimates of the Financial Situation of Woolgrowers in 1969-70" as quoted in the *First Interim Report of the Australian Wool Board Advisory Committee*. (B.A.E. Canberra, July, 1970), p. 10.

³ Bureau of Agricultural Economics, *Supplement to the Australian Sheep Industry Survey, 1964-5 to 1966-7* (B.A.E. Canberra, 1968).

REVIEW OF MARKETING AND AGRICULTURAL ECONOMICS

TABLE 4
Net Farm Incomes in 1966-7 and Estimated Net Farm Income in 1969-70 for Australia's Grazing Zones

Zones	Farm Size	Net Farm Income		
		1966-7	1969-70	
			Assuming 5 per cent decline on 1966-7	Assuming 18 per cent decline on 1966-7
High Rainfall Sheep Zone.	(No. of sheep)	\$	\$	\$
	200- 500	2,925	2,779	2,399
	500- 1,000	4,490	4,266	3,682
	1,000- 2,000	7,573	7,194	6,210
	2,000- 5,000	15,106	14,351	12,387
	5,000-10,000	32,373	30,754	26,546
	10,000+	26,737	25,400	21,924
Wheat and Sheep Zone.	(No. of sheep)	\$	\$	\$
	200- 500	2,429	1,857	1,548
	500- 1,000	7,120	5,036	4,197
	1,000- 2,000	10,342	7,105	5,921
	2,000- 5,000	16,347	11,574	9,645
	5,000-10,000	35,667	24,962	20,802
	10,000+	48,956	37,563	31,303
Pastoral Zone	(No. of sheep)	\$	\$	\$
	500- 1,000	3,631	1,816	1,634
	1,000- 2,000	3,673	1,837	1,653
	2,000- 5,000	6,859	3,430	3,087
	5,000-10,000	15,135	7,568	6,811
	10,000-20,000	23,976	11,988	10,789
	20,000+	35,338	17,669	15,902

Source: Bureau of Agricultural Economics. *Supplement to the Australian Sheep Industry Survey 1964-5 to 1966-7* (Canberra, 1968).

charged by various financial institutions for different types of loan for the year 1968-9. The periods over which loans must be repaid were also reviewed.⁴ Using this information it is possible to calculate the mean rate of interest paid by farmers. If it is assumed that rates of interest for each financial institution in each year vary by the same percentage as changes in the maximum overdraft rate, it is possible to calculate the mean interest rate paid by farmers in 1966-7 and in 1969-70.⁵ The mean period of loan repayment can be calculated in the same way. Details of these calculations are shown in Appendices A and B and indicate that the mean rate of interest paid by farmers was 6.38 per cent in 1966-7 and 7.02 per cent in 1969-70. Using this information it is possible to calculate the debt owed by the graziers in the different farming zones in 1966-7 (table 5).

TABLE 5

Interest and Debts on Farms of Different Sizes in Australia's Grazing Zones

	Farm size	1966-1967		1969-1970	
		Interest paid	Estimated average debt	Estimated interest paid	Estimated average debt
	No. of sheep	\$	\$	\$	\$
High Rainfall Sheep Zone.	200- 500	276	4,325	409	5,839
	500- 1,000	466	7,302	690	9,858
	1,000- 2,000	795	12,458	1,177	16,818
	2,000- 5,000	1,189	18,632	1,761	25,153
	5,000-10,000	3,469	54,359	5,137	73,385
	10,000+	2,830	44,346	4,191	59,867
Wheat and Sheep Zone.	200- 500	385	6,033	570	8,145
	500- 1,000	510	7,992	755	10,789
	1,000- 2,000	423	6,628	626	8,948
	2,000- 5,000	1,190	18,647	1,762	25,173
	5,000-10,000	2,154	33,753	3,190	45,567
	10,000+	7,958	124,702	11,784	168,348
Pastoral Zone ..	500- 1,000	216	3,385	320	4,570
	1,000- 2,000	317	4,967	469	6,705
	2,000- 5,000	790	12,379	1,170	16,712
	5,000-10,000	1,251	19,603	1,852	26,464
	10,000-20,000	3,541	55,487	5,244	74,907
	20,000+	1,999	31,324	2,960	42,287

⁴ Reserve Bank of Australia, *Credit Facilities for Rural Producers in Australia* (R.B.A. Sydney, January, 1970).

⁵ Reserve Bank of Australia, *Statistical Bulletins 1966-7 to 1969-70* (R.B.A. Sydney)

The accuracy of estimating the debts owed by graziers from the amount of interest paid by them and the mean interest rate can be checked by calculating the total borrowings of sheep and wheat farmers. This is achieved by multiplying the estimated debt of each farm in each size group by the number of farms in the group. Details of this calculation are given in Appendix C and suggest that the total borrowings of sheep farmers and wheat farmers are \$961.3m. The total money loaned by major trading banks to wheat and sheep farmers in 1966-7 was \$404.8m. In the same year major trading banks accounted for 46.5 per cent of lending by all financial institutions to all farmers.⁶ If this proportion is also applied to wheat farmers and sheep farmers, then their total debt to all financial institutions was \$870.5m. This sum is 95 per cent of the estimated total \$916.3m debt owing by all sheep and wheat farmers, to all lenders as calculated from the B.A.E. survey. Allowing for some private borrowing by farmers in addition to money borrowed from financial institutions, the calculated debt appears to be of the right order.

Total borrowings from all financial institutions in 1966-7 and in 1969-70 are shown in table 6. These suggest that total rural indebtedness increased by 35 per cent between 1966-7 and 1969-70. The total debt owed by graziers in each grazing zone in 1969-70, assuming that their debts increased 35 per cent and the mean interest paid on this debt was 7 per cent (as calculated in appendix A), is shown in table 5. The mean annual amounts of additional capital invested in plant, livestock and structural improvements in 1964-5 and 1966-7 are shown in table 7.

TABLE 6
Total Rural Borrowings From Financial Institutions

	\$		\$
July, 1966	1,411	July, 1969	1,971
July, 1967	1,603	July, 1970	2,085
Mean	1,507	Mean	2,028

Source: Reserve Bank of Australia, *Statistical Bulletins* (Supplemented by private communication from the Reserve Bank).

Using the data in tables 4, 5, and 7 it is possible to calculate the residual farm income in 1966-7 and the estimated residual farm income in 1969-70 for farms of different sizes in each farming zone. The results of this calculation are shown in table 8.

⁶ Reserve Bank of Australia, *Credit Facilities, op. cit.*

TABLE 7

Average Additional Capital Invested in Plant, Livestock and Structures on Australian Sheep Farms

Zones	Farm size	Additional capital invested
	(No. of sheep)	\$
High Rainfall Sheep Zone	200- 500	883
	500- 1,000	1,257
	1,000- 2,000	2,488
	2,000- 5,000	2,344
	5,000-10,000	9,426
	10,000+	12,621
Wheat and Sheep Zone	Zone	1,840
	200- 500	330
	500- 1,000	1,963
	1,000- 2,000	2,475
	2,000- 5,000	3,743
	5,000-10,000	11,221
Pastoral Zone*	10,000+	12,883
	Zone	2,150
	500- 1,000	-299
	1,000- 2,000	50
	2,000- 5,000	-361
	5,000-10,000	-1,626
	10,000-20,000	-5,145
	20,000+	-5,899
	Zone	-1,241

* Negative investment in the Pastoral Zone is caused by decreasing livestock numbers.

3 FINANCIAL VIABILITY AND RESIDUAL INCOME

Residual income represents the amount that the farmer has to live on after he has met his annual costs including depreciation, interest and debt repayment and after an allowance has been made for further investment on the property.

The difficulty is to select the level of residual income required if farms are to remain viable, as this depends on the income which is considered necessary to maintain the farmer. One practical approach is to select the residual income of the smallest group of farms in each zone in 1966-7 as the minimum sum required if farms are to remain in business.⁷ With the exception of the Pastoral Zone the smallest farms also had the lowest residual income. If this criterion is accepted, the minimum viable incomes for each zone are as follows:

	\$
High Rainfall Sheep Zone	1,148
Wheat and Sheep Zone	1,237
Pastoral Zone	2,931

⁷ B.A.E., *Supplement to Sheep Industry Survey, op. cit.*

TABLE 8
Residual Income on Farms of Different Sizes in Australia's Grazing Zones

Zone	Farm size (No. of sheep)	Percentage of farms	Period of Repayment (Years)	Residual Income (\$)											
				1966-67						1969-70					
				7		7		7		20		20		30	
High Rainfall Sheep Zone..	200- 500	26	..	1,148	5 per cent 653*	18 per cent 273*	5 per cent 1,195	18 per cent 815*	5 per cent 1,292	18 per cent 1,242	5 per cent 1,990	18 per cent 912*			
	500- 1,000	30	..	1,724	911*	327*	1,826	1,242	1,406	1,984	2,968	1,406			
	1,000- 2,000	29	..	2,510	1,126*	142*	2,688	1,704	2,984	7,444	9,408	7,444			
Wheat and Sheep Zone ..	2,000- 5,000	13	..	8,911	6,653	4,689	8,988	7,024	9,408	13,745	9,537	9,537			
	5,000-10,000	2	..	11,712	5,707	1,499	12,522	8,314	13,745	6,592	3,116	3,116			
	10,000+ Zone	<1 100	..	4,951	36*	-3,440*	5,595	2,119	6,592	2,022	3,137	2,257			
Pastoral Zone†	200- 500	25	..	1,237	34 per cent -207*	45 per cent -516*	34 per cent 550*	45 per cent 241*	34 per cent 685*	45 per cent 376*	34 per cent 685*	45 per cent 376*			
	500- 1,000	31	..	4,014	777*	-62*	1,779	940*	1,958	1,119*	1,958	1,119*			
	1,000- 2,000	29	..	6,920	2,726	1,542	3,557	2,373	3,706	2,522	3,706	2,522			
Pastoral Zone†	2,000- 5,000	14	..	9,940	2,473	544*	4,810	2,881	5,230	3,301	5,230	3,301			
	5,000-10,000	1	..	19,624	4,041	-119*	8,273	4,113	9,032	4,872	9,032	4,872			
	10,000+ Zone	<1 100	..	18,258	-11,154*	-17,414*	4,479	--	7,284	1,024*	7,284	1,024*			
Pastoral Zone†	500- 1,000	4	..	2,931	50 per cent 843*	55 per cent 661*	50 per cent 1,267*	55 per cent 1,085*	50 per cent 1,344*	55 per cent 1,162*	50 per cent 1,344*	55 per cent 1,162*			
	1,000- 2,000	16	..	2,646	410*	226*	1,033*	849*	1,144*	960*	1,144*	960*			
	2,000- 5,000	40	..	4,301	-127*	-470*	1,424*	1,081*	1,703*	1,360	1,703*	1,360			
Pastoral Zone†	5,000-10,000	30	..	11,084	1,935*	1,178*	4,393	3,636	4,834	4,077	4,834	4,077			
	10,000-20,000	8	..	12,508	-3,957	-5,156*	2,999	1,800*	4,247	3,048	4,247	3,048			
	20,000+ Zone	2 100	..	28,864	8,668	6,901	12,595	10,828	13,299	11,532	13,299	11,532			

* Farm size groups whose average estimated residual income is less than the average residual income of the smallest size group in the zone in 1966-7.
 † Additional capital investment in the Pastoral Zone was negative in 1964-5 and 1966-7 because livestock numbers declined. Residual income for this zone is therefore defined as:
 Gross Revenue—Cash costs—depreciation—interest—debt repayment.

When this criterion is applied to the estimated Residual Incomes for 1969-70, assuming that debts are repaid over a period of 7 years, it is seen that the following average farm size groups would no longer be economically viable even if the *minimum* declines in the net farm income predicted by the B.A.E. occur (table 9).

High Rainfall Sheep Zone—Holdings with less than 2,000 sheep and more than 10,000, comprising 85 per cent of all farms in the Zone.

Wheat and Sheep Zone—Holdings with less than 1,000 sheep, comprising 56 per cent of all farms.

Pastoral Zone—All holdings with less than 20,000 sheep, comprising 98 per cent of all holdings in the zone.

Although the use of the average residual income of the smallest farms in 1966-7 as the criterion of economic viability suggests that a high proportion of holdings would not be viable in 1969-70, it may be lower than the true figure. Off-farm income is not recorded in the B.A.E. Sheep Industry Survey and it is possible that a high proportion of the smaller farms have other sources of income from working for other farmers, or from contracting. However, the use of a higher figure, for example, the minimum adult male wage of \$2,700 in 1970 makes no difference to the conclusion drawn. If the *highest* decrease predicted by the B.A.E. occurs, the same groups are non-viable in the High Rainfall Sheep and Pastoral Zones. However, in the Wheat and Sheep Zone all groups except 1,000 to 2,000 sheep would become non-viable using the residual income of the smallest size group in 1966-7 as a criterion, and all groups would be non-viable using the minimum wage in 1970 of \$2,700.

Whichever criterion is used, it is only possible to conclude that a high proportion of farms in all grazing zones are no longer economically viable at 1969-70 prices if the B.A.E.'s estimates of the decline in net farm income are correct. This situation could only be changed by farmers increasing productivity at a far greater rate than in the past. With the area of wheat which can be produced limited by quotas, increases in productivity could only be achieved by introducing new crops, by heavier stocking or by substituting cattle for sheep. However, the number of alternative crops is extremely limited in the southern wheat belt. Increasing livestock numbers would require additional capital, particularly if cattle are to be substituted for sheep. At the national level, the rate at which livestock numbers can be increased depends on the rate at which additional livestock can be bred. Thus even if heavier stocking or the replacement of sheep by cattle are a means of restoring viability, some time would be required before they become effective.

TABLE 9
Non-viable Farms in Australia's Grazing Zones in 1969-70

Zones	Period of Debt Repayment	7 years		20 years		30 years	
		5 per cent > 2,000	18 per cent > 2,000	5 per cent Nil	18 per cent > 500	5 per cent Nil	18 per cent > 500
High Rainfall Sheep Zone.	Decline in income from 1966-7 Non-viable groups (No. of sheep)	85	85	Nil	26	Nil	26
	Proportion of farms in non-viable groups (Per cent) ..	85	85	Nil	26	Nil	26
Wheat and Sheep Zone	Decline in income from 1966-7 Non-viable farm groups (No. of sheep) ..	> 1,000	All but 1,000-2,000	> 500	> 1,000	> 500	> 1,000
	Proportion of farms in non-viable groups (per cent) ..	56	71	25	56	25	56
Pastoral Zone ..	Decline in income from 1966-7 Non-viable farm groups (No. of sheep) ..	> 20,000	> 20,000	> 5,000	> 5,000 + 10,000-20,000	> 5,000	> 5,000
	Proportion of farms in non-viable groups (per cent) ..	98	98	60	68	60	60

4 THE EFFECT OF THE PERIOD OF DEBT REPAYMENT OF ECONOMIC VIABILITY

The average period of debt repayment for money borrowed by farmers was estimated as 7 years (appendix B). One suggested solution to the present farm financial crises is that the period over which debts are repaid should be increased by the State providing special credit facilities. Even without state intervention, such a policy might be forced on lending institutions if a high proportion of graziers are unable to pay their debts. Using the data in tables 4, 5, and 7 it is possible to calculate the residual income if debts are repaid over any period of time. The results of these calculations assuming debts are repaid over 20 to 30 years are shown in tables 8 and 9.

In the High Rainfall Sheep Zone, all size groups are viable if debt repayment is extended over 20 years, provided 1969-70 net incomes are only 5 per cent lower than in 1966-7. However, with an 18 per cent decline in net farm income from 1966-7 level, farms with 200 to 500 sheep, which comprise 25 per cent of holdings in the region, are non-viable even if debt repayment is extended over 30 years. In the Wheat and Sheep Zone, extending the period of debt repayment to 20 years makes all size groups with more than 500 sheep viable. If net farm incomes decline by 45 per cent, all size groups with less than 1,000 sheep and those with more than 10,000 sheep remain non-viable even if the debt repayment period is extended to 30 years. The extension of the period of debt repayment has its most dramatic effect in the Pastoral Zone. If the repayment period is extended to 30 years, all farm size groups with more than 5,000 sheep are viable even if net farm incomes in 1969-70 are 55 per cent lower than in 1966-7.

Although the expansion of the period of debt repayment is an effective means of increasing the number of viable farm size groups, it will not give total relief. If farm incomes decrease by the highest percentage predicted by the B.A.E. in 1969-70, 25 per cent of farms in the High Rainfall Sheep Zone, 56 per cent of the farms in the Wheat and Sheep Zone and 60 per cent of the properties in the Pastoral Zone remain non-viable.

The only long term solution to the problem would appear to lie in amalgamating the smaller holdings into larger units. Given extended periods of debt repayment, almost all of the larger size groups in all zones appear to be economically viable. The exceptions are the largest size groups (more than 10,000 sheep) in the Wheat and Sheep Zone. The poor economic performance of this group and of the same size group in the High Rainfall Sheep Zone is difficult to explain. Possibly holdings of this size are run on an extensive basis and are not typical of holdings in the region. As the number of these large holdings is less than one per cent of the total farms in both zones they can scarcely be considered as evidence that amalgamation of smaller holdings is not a solution to the problem of economic viability.

APPENDIX A

CALCULATION OF AVERAGE INTEREST CHARGED FOR FARM LOANS

(1) *Mean Interest 1966-7*

Source of borrowing	Rural borrowing	Interest rate*	Total interest charged
	\$m	Per cent	\$m
Major trading banks—			
Overdraft	604.95 ×	6.575 =	39.77546
Term loan	84.2 ×	6.765 =	5.69613
Development loan	11.3 ×	6.095 =	0.68874
Exservice	95.5 ×	3.000 =	2.86500
Other government	259.5 ×	5.625 =	14.59688
Pastoral finance	267.5 ×	7.625 =	20.39688
Development bank	106.0 ×	5.875 =	6.22750
Assurance societies	78.0 ×	7.625 =	5.94750
Total	1,507.0		96.19409

$$\text{Mean Interest} \frac{96.19409}{1507.0} \times \frac{100}{1} = 6.383 \text{ per cent.}$$

* Obtained by decreasing all interest rates charged in 1968-9 (except for exservice loans) by the difference between the maximum overdraft rate in 1968-9 and 1966-67, a difference of 0.25 per cent.

APPENDIX A (continued)

(2) Mean Interest 1960-70

Source of borrowing	Rural borrowing	Interest rate*	Total interest charged
	\$m	Per cent	\$m
Major trading banks—			
Overdraft	769 ×	7·1583 =	55·05
Term loan	131 ×	7·3483 =	9·63
Development loan ..	69 ×	6·6783 =	4·61
Exservice settlement ..	84 ×	3·0000 =	2·52
Other government ..	341 ×	6·2803 =	21·41
Pastoral finance companies	344 ×	8·2083 =	28·24
Development bank ..	169 ×	6·4583 =	10·91
Assurance societies ..	123 ×	8·2083 =	10·10
Total	2,030		142·47

$$\text{Mean interest} = \frac{142.23}{2030} \times \frac{100}{1} = 7.02 \text{ per cent.}$$

* Obtained by increasing all 1968-9 interest rates (except exservice loans) by the difference between the average maximum overdraft rate for rural borrowers in 1969-70 and 1968-9, a difference of 0·2083 per cent.

Source:

Reserve Bank of Australia, *Credit Facilities for Rural Producers in Australia* (January, 1970).

Reserve Bank of Australia, *Statistical Bulletin, 1966-7 to 1969-70* (supplemented by information supplied by the Reserve Bank).

APPENDIX B

Calculation of Mean Repayment Period

Source of borrowing	Total borrowing July, 1968-9	Years of repayment	
Major trading banks—			
Overdraft	745 ×	5 =	3,725
Term loans	127 ×	5 =	635
Development loans ..	67 ×	15 =	1,005
Exservice loans	85 ×	20 =	1,700
Other government lending	332 ×	14 =	4,648
Pastoral companies ..	338 ×	1 =	338
Development bank ..	162 ×	5 =	810
Assurance companies ..	115 ×	10 =	1,150
Total	1,971		14,011

$$\text{Mean period of repayment} = 7.1 \text{ years.}$$

Source: Reserve Bank of Australia. *Credit Facilities for Rural Production in Australia*. January, 1970.

REVIEW OF MARKETING AND AGRICULTURAL ECONOMICS

APPENDIX C

*Calculation of the Total Debt Owed by Australian Graziers and Wheat Farms
(1966-7)*

	Farm size group	Estimated debt	No. of farms	Total debt
High Rainfall Sheep Zone.	No. of sheep	\$		\$'000
	200- 500	4,325	9,375	40,547
	500- 1,000	7,302	10,897	79,570
	1,000- 2,000	12,458	10,378	129,289
	2,000- 5,000	18,632	4,548	84,738
	5,000-10,000	54,359	655	35,605
	10,000+	44,346	125	5,543
	Total			375,292
Wheat Sheep Zone . .	200- 500	6,033	12,429	74,984
	500- 1,000	7,992	15,306	122,326
	1,000- 2,000	6,628	14,191	94,058
	2,000- 5,000	18,647	6,690	124,748
	5,000-10,000	33,753	619	20,893
	10,000+	124,702	120	14,964
	Total			451,973
Pastoral Zone . .	500- 1,000	3,385	292	988
	1,000- 2,000	4,967	1,266	6,288
	2,000- 5,000	12,379	3,148	38,969
	5,000-10,000	19,603	2,341	45,891
	10,000-20,000	55,487	657	36,455
	20,000+	31,324	176	5,513
	Total			134,104

Total debt, all wheat and sheep farmers—\$961,369,000.