TWO SUGGESTED ADJUSTMENTS IN FARM INCOME MEASUREMENT USING TAXATION DATA*

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The paper sets out two adjustments for taxation data when income distribution is relevant. The adjustments are used on income series for primary producers and wholesale-retail trading and results compared. Little difference is found between the two income series though the latter years show the wholesale-retail traders series continuing on an upward trend, while the primary producers series appears to climb at a slower rate or has flattened out. An examination of income led to similar conclusions though these figures seem to imply that in both industries there is a hard core of poverty, individuals who can neither raise their income nor move out of the industry.

Discussion of the welfare of farm families is greatly assisted by reliable information on farm income and its distribution. Farm surveys are an expensive and usually partial way of obtaining such data and, for those who want a coverage of the farm sector as a whole, recourse must be had to secondary data in the form of taxation statistics. This is particularly true if the purpose of the analysis is to establish the welfare status of the farm sector by means of comparisons with incomes received in other sectors of the economy.

The use of taxation data in its crude uncorrected form can give misleading results due, among other things, to the exclusion of those who do not pay tax (non-taxables) from the data and to the impact of family partnership formation on the published population of taxpayers. This last is a problem because it is probable that most partnerships in the rural sector are 'within the family' and are formed to reduce the family taxation burden and not to obtain a sharing of managerial function. As those concerned with the relative welfare of the farm sector are interested in family incomes it would seem to be desirable to correct the population of taxpayers for the incidence of these family partnerships. Wells and Bates [7] have suggested one method of correction. This paper contains an alternative method as well as a procedure by which the number of non-taxables can be estimated.

The procedures are applied to the eleven years starting 1958-59. The paper falls into three sections. The first section deals with the estimation of the number of non-taxables, the second with the correction of the population for family partnerships, while the third uses the adjustments in a comparison of farm incomes with those of wholesale-retail traders. The paper closes with a consideration of some implications of the results.

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I

Estimation of the Number of Non-Tax Paying Farmers

Non-taxables are those who earn insufficient income to pay tax or whose income is, for some other reason, exempt from tax. If they are excluded from the population of income earners the estimated distribution of income would be biased upward. The extent of the problem involved is indicated by fluctuations in the reported population of primary producer taxpayers. The number of primary producing taxpayers has varied considerably over the period 1958-59 to 1968-69. It reached a maximum of 322,298 in 1963-64 and a minimum of 249,183 in 1967-68 [1]. Assuming a stable population of potential taxpaying primary producers it could be concluded that there were at least 73,115 (322,298—249,183) non-taxables in 1967-68. In fact, the actual number of non-taxables in this year was probably higher due to the fact that there were, in all probability, non-taxables in 1963-64, and the population was not stable, growing in the period 1953-54 to 1965-66 at an average rate of 7,007 per year.[1]

However, the suggestion is that, in 1967-68, the actual number of primary producers was at least a third higher than the reported number of taxpaying primary producers and it would seem that some attempt should be made to include non-taxables in the population under study.

The total number of non-taxables, classified by industry, is published on an occasional basis. The two most recent occasions were 1953-54 and 1965-66. Data on the number of non-taxables is not available for other years in the period of interest and, in order to estimate them, some estimate must be made of the total number of 'potential' taxpayers in each year of interest. The number of non-taxables can then be obtained by subtracting the 'actual' number of taxpayers as reported in the taxation statistics from the estimated potential number.

In order to estimate the potential number it is assumed that

(a) the only factor increasing potential numbers is partnership formation, and

(b) that one of the members of a new partnership was already included in the numbers of the previous year.

In effect this means that the net change in potential numbers in any one year will be the increase in partnership subtracted from the increase in partners. Apart from this the population of primary producers is assumed to remain stable.

The number of non-taxables is reported for 1965-66 only, within the period of interest. Consequently, this year becomes a base year for which the true potential population is known.[2] Numbers are estimated for the other years in the period by working from this base. For example, if there was a net increase of 500 potential taxpayers in 1964-65, (i.e. say there had been an increase of 800 in the number of partners and an increase of 300 in the number of partnerships which gives an increase of 800 — 300 = 500 potential taxpayers) we would

[1] This figure was arrived at by comparing total populations as published in 1953-54 and 1965-66 and dividing the difference by 12, the number of years between.

[2] It was assumed that those who never submitted tax returns formed a constant proportion of potential taxpayers in all industry groups and income grades.

subtract this figure from the potential numbers in 1965-66, giving the estimated potential numbers in 1964-65. In this way successive net changes before 1965-66 are subtracted from the base number while those after 1965-66 are added.

As a check on this method the number of potential taxpayers in 1965-66 was derived from the potential number reported in 1953-54. That is the increase in partnerships was subtracted from the increase in partners over the period, giving the net increase over the period. This net increase was added to the potential numbers reported for 1953-54 and the result was compared with the potential number as reported in 1965-66. The result was a positive discrepancy of 4,097 or 315 per year. This is a difference of about 4 per cent and suggests that there could have been a slight decline in the number of business units during the period.

TABLE 1

The Estimated Number of Non-taxables, and the Potential Total Number of Taxpayers in the Primary Production Sector

Income Year	Estimated number of Non-taxables	Potential total number of Taxpayers
1958-1959	37,734	318,119
1959-1960	31,963	325,266
1960-1961	26,663	334,605
1961-1962	35,355	341,183
1962-1963	29,358	350,135
1963-1964	37,497	359,795
1964-1965	63,096	365,437
1965-1966	83,617	368,530
1966-1967	65,974	369,497
1967-1968	123,361	372,544
1968-1969	97,135	389,049

The estimates for 1958-59 to 1968-69 are shown in Table 1. It should be borne in mind that this result is based on the assumption of zero growth in the number of firms in the industry. This is probably reasonable in the case of primary production [5], as the above check shows, but caution should be exercised if the method is to be applied to other sectors where the possibility of growth or contraction should be considered.[3]

II

Income Splitting through Family Partnership Formation

Under Australian income tax law all self-employed tax-payers, except people in the professions, are permitted to 'split' their incomes by the formation of operating partnerships. If the operating partnerships consist only of family members it is an effective means by which the family unit may reduce its total income-tax liability. The arrangement does

[3] The authors have applied the technique to another group of self-employed, wholesale and retail traders. The results obtained are discussed in relation to those for the primary producer group in the third section of this paper. For the moment, it should be noted that the assumption of stability in the number of business units in the wholesale retail sector appeared reasonable in the face of a small net increase of about 500 units or 0·3 per cent over the five year period 1956-57 to 1961-62. The number of individual traders plus partnerships rose from 103,875 in 1956-57 to 104,368 in 1961-62. See [2].

not imply any actual sharing of managerial or work responsibility and before-tax family income is not increased as a result of the change. This practice is known as income splitting and, as has been indicated, has already been examined by Wells and Bates [7] who showed that, over the period 1953-54 to 1965-66, there was a rise of some 51,900 in the number of females engaged in primary production. They suggested that this increase was due to the increasing practice of females entering into partnership arrangements with members of their family for income splitting purposes. By holding the number of females constant at the 1953-54 level they claimed to have obtained a more accurate calculation of the number of business units in primary production. This adjustment is of little use if the aim is to depict the distribution of income and an alternative adjustment is necessary.[4]

The assumption was made that all partnerships are formed for the purpose of income splitting.[5] Then, using the proportion of the population in partnerships and the average number of partners per partnership, the number of partners and partnerships in each income grade was estimated. All partnerships were moved up to the grade they would have achieved had no splitting occurred. There they were added to the sole traders in the grade. The sole traders are those who remain in a grade after the number of partners estimated to be in the grade is subtracted from the total number of taxpayers in the grade.

For example, if in an industry the proportion of individuals who are partners was say 50 per cent and if the average number of partners per partnership was 3,[6] then the adjustment would be as follows. If the income grade $1000-$2000 contains 3,600 individuals 1,800 of these would be partners in 600 partnerships. Assuming all partnerships are for the purpose of income splitting then, given an even split among the partners, each partnership earned between $3000 and $6000. An even distribution of the partners within the grade would result in an even distribution of the 600 partnerships between the three grades, $3000-$4000, $4000-$5000, and $5000-$6000. That is 200 partnerships would be added to the sole traders in each of these three grades. The number of sole traders in the $1000-$2000 grade would stand at 1,800 after the removal of the partners.

In order to estimate the proportion of individuals in partnerships the total number of potential taxpayers is required. For this purpose the estimates of these numbers shown in Table 1 of this paper were used.

[4] To use the method of adjustment we need to know or assume something of grades. That is if in 1953-54 we had say 200 females in the income grade $1000—$2000 and in 1958-59 we had 400, do we eliminate the additional 200 as the Wells and Bates adjustment does or do we argue that we should eliminate fewer because farmer incomes have fallen or do we argue that inflation has raised income therefore we should eliminate more. If we can accept either argument we must then decide how each of the other income grades must be adjusted. Either way arbitrary assumptions are necessary which affect the distribution in a substantial fashion.

[5] This is used as a working assumption to enable the true proportion to be gauged better. In section III results are presented under the assumptions that partnerships were formed for income splitting purposes in 50, 75 and 100 per cent of cases.

[6] The actual number of partners per partnership and the proportion of individuals who are partners, along with other figures used, are contained in the appendix.

In the case of non-taxables it was assumed that all partnerships earned less than $1000, that is each partner earned less than $430.[7] Thus for the non-taxables we estimate the number of partnerships and sole traders and add them to those remaining in the zero to $1000 income grade. To the extent that the assumption is wrong there will be an upward bias to the proportion earning less than $1000, and a downward bias in the other grades with the main bias being in the lower grades.

It was assumed that the average number of partners per partnership was constant throughout the period of interest.[8] Comparison with actual proportions given in the appendix and evidence advanced by Wells and Bates [6] would seem to support this assumption. It addition to the assumptions already mentioned, there are three others which should be listed. These are:

1. The incentive to form partnerships for the purpose of reducing taxation is the same for all grades of income. This seems reasonable as the desire to avoid giving money to the government would be the same whether the amount involved was large or small. Furthermore, though the saving is far greater at higher incomes, the utility of an extra dollar is greater when income is low.

2. Partnerships split their income equally among the partners. This would seem to be at least near the optimum choice for a person desiring to minimize tax.[9]

3. Individuals are spread evenly throughout any one income grade. There seems no reason to believe that any alternative assumption is more realistic.[10]

A test of the results is to compare the number of farm families earning less than $2000 estimated using the above approach with the estimate by McKay [4] for the early sixties. For 1962-63 the above approach gave an estimate, after all adjustments, of 63,006 families earning less than $2000. This figure is 17,000 under McKay's figure of 80,000. Some underestimation is probably inherent in the above method because of the assumption that all partnerships are formed for income splitting purposes. When it was assumed that only 75 per cent of partnerships were formed for this purpose the 1962-63 figure for the number of families earning less than $2000 increased to 87,048 an overestimation of some 7000. If McKay's figure is accepted as the

[7] This assumption was unavoidable for all years except 1965-66 because the estimates of non-taxables do not give their distribution by income grades. The assumption is reasonable in that for income year 1965-66, 72·5 per cent of non-taxables earned less than $430. In absolute terms 154,954 earned more than $430. Number of taxpayers here refers to all self-employed persons.

[8] This assumption is only crucial for grades below $5000. As the highest income grade includes all incomes above $10,000, any partnership whose members earned more than $5000 each must, given assumption 3 below, come from a partnership with income greater than $10,000.

[9] While this assumption seems reasonable no support can be offered for it and the results of Section III are open to question because of this. However, as long as each industry departs from the assumption in a similar manner the conclusion reached will still hold. There is no apparent reason for assuming that the behaviour of partnerships in different industries should differ significantly.

[10] In the lower income grades the taxation statistics have intervals of $200 so any potential error would be small. The actual grades used are given in the appendix.

correct one, then linear interpolation suggests a true proportion of income splitting partnerships of about 80 per cent.

III

As a comparison of farm with non-farm incomes we have chosen to compare 'primary producers' with the 'wholesale and retail traders' industry. The wholesale and retail trade industry is one of the nine industries in the Taxation Department's Industrial Code. This Code classifies individual taxpayers who are subject to provisional tax (i.e. self-employed) according to the industry which is the main source of their personal exertion income. The nine industries are:

Primary production,
Mining,
Manufacturing,
Building and Construction,
Transport and Communications,
Wholesale and Retail traders,
Professions,
Other industries, and
Industries not stated.

The common comparison of primary production and non-farm self-employed has not been used as the high incomes in some industries, such as 'Professions', would cause an upward bias to the observed non-farm incomes. Thus, it is felt that in any attempt to establish the relative position of farmers the comparison must be between industries and not between an industry and the remaining aggregate.

The reasons for selecting the wholesale-retail trade industry are as follows:

It is the largest industry, apart from primary production, in terms of number of workers, and so contains a significant number of people.

A more important reason is that the two industries have a lot in common. First, the majority of firms in both industries are small owner-operated units, whose owners live on the job and tend to work long hours. Second, both groups can consume much of their food at wholesale prices. Third, in many cases all members of the family contribute to the running of the business. Finally, the wholesale-retail traders, like the primary producer, have been subject to rapid technological change (the introduction of supermarkets), and a severe cost/price squeeze, especially over the last two decades.

An additional reason for selecting such a comparison is that for farmers who wish to move out of primary production and remain self-employed, the only industry in the taxation department classification that they could freely move into is that of wholesale-retail traders.

The above two suggested adjustments were used to calculate revised income distributions for both industries over an eleven-year period ending 1968-69. From the new distributions the new adjusted populations were calculated and used to find both average taxable and average actual incomes.[11]

[11] Actual income is defined as gross income (including income exempt from taxation) less expenditure incurred in gaining that income. Taxable income is that income on which tax must be paid i.e. actual income minus tax deductions.

Though all estimates and adjustments were carried out under the three assumptions of 50, 75 and 100 per cent income splitting partnerships, the results presented in this paper are generally confined to those obtained under the assumption of 75 per cent income splitting because of supporting evidence discussed in Section II.

The effect of moving from 100 to 75 per cent of partnerships being formed for income splitting purposes was for wholesale-retail traders incomes to be lower by $635 in the initial year of the study. This reduction steadily increased to $1329 in the last year. For primary producers the reductions were more variable, not exhibiting a steady increase although still tending that way, ranging from $405 in the initial year to $1012 in the final year. When moving from 75 to 50 per cent income splitting the reductions behave in a similar manner but are smaller. That is for wholesale-retail traders the initial reduction is $466 and later reaches $883 while for primary producers the range is from $219 up to $519.

Although average actual income and average taxable income (adjusted for non-taxables and 75 per cent income splitting partnerships) were computed for both industries, only average actual income is shown. These figures, which are presented in Table 2, show that while farmers were worse off, in terms of actual income, in the majority of years the difference is not great. The average difference over the eleven years is $206.

Examination of the difference between actual and taxable figures show that farmers' tax deductions on average are greater than those of wholesale-retail traders. This difference is to be expected as primary producers have the advantage of deductions under Sections 75 and 76 of the Assessment Act for certain expenditure on land used for primary production.[12] As actual income includes these deductions, a comparison of the difference between actual and taxable incomes in the two industries will quantify the value of this advantage to farmers. It is of interest to note that the average difference in deductions is small, being only $109.

TABLE 2

Average Actual Income, Primary Producers and Wholesale-Retail Traders, Adjusted for 75 per cent Income Splitting and for Non-taxables

Year	Primary Producers	Wholesale and Retail Traders
	$	$
1958-1959	3028	3506
1959-1960	3509	3635
1960-1961	3687	3687
1961-1962	3545	3825
1962-1963	4175	3855
1963-1964	5141	3995
1964-1965	4350	4242
1965-1966	3928	4441
1966-1967	4576	4792
1967-1968	3446	5096
1968-1969	4689	5257

[12] See Fiftieth Report [1] p. 9.

The average actual income figures in Table 1 also show that while the wholesale-retail traders average incomes climb steadily, farm incomes are quite variable. It should also be noted that, while there was some variation in farm income over the period 1958-59 to 1963-64, there was also a marked upward trend. This trend is not at all apparent over the last five years of the study, but the increased variation is. In addition the last three years of the study suggest the possibility of a deterioration of farm incomes relative to wholesale-retail traders. In particular, while farm income in 1968-69 was the second highest for the period, the income of wholesale-retail traders exceeded farm income by more than it did in any other year in the period studied, except 1967-68.

In Table 3 the proportions of both primary producers and wholesale-retail traders earning less than $1000, $2000 and $3000 are shown. For both industries the proportion earning less than $1000 is higher at the end of the eleven-year period than at the start. In view of the effects of persistent inflation this result is rather surprising even if real income had remained stationary. It should also be noted that, even if real incomes were stationary and the inflation rate were zero then, for the absolute number earning less than a specified amount to remain constant, the proportion earning less than this amount must fall, due to the growth of numbers in each industry. The proportion of primary producers in the less than $1000 grade is higher and shows no tendency to decrease. For wholesale-retail traders the proportion rose for the first six years then fell to the last year when it again rose.

An examination of the proportion earning less than $2000 reveals a different position. There is a definite downward trend in the proportion of wholesale-retail traders in this group and a less obvious downward trend in the proportion of primary producers. For both industries the proportion in the last year is approximately 11 per cent lower than at the start of the period. One possible explanation of the difference in the behaviour of the proportions in the two grades is that there is a hard core of poverty, individuals who can neither raise their incomes (due to a lack of capital, for example) nor move out.

TABLE 3

Percentages of Primary Producers and Wholesale-Retail Traders Earning Less than Certain Income Levels

Year	Primary Producers			Wholesale-Retail Traders		
	<$1,000	<$2,000	<$3,000	<$1,000	<$2,000	<$3,000
1958-1959	24.15	48.97	66.57	15.10	40.94	60.85
1959-1960	20.07	42.71	60.79	15.64	39.60	58.42
1960-1961	17.63	39.53	57.63	15.26	38.26	57.08
1961-1962	20.04	41.49	59.15	15.50	37.60	55.89
1962-1963	16.68	35.98	53.01	16.53	37.63	55.64
1963-1964	14.71	30.15	45.65	17.54	36.47	53.83
1964-1965	21.06	35.46	50.60	16.06	35.58	50.76
1965-1966	26.24	39.90	54.29	15.29	31.57	48.48
1966-1967	20.96	33.38	47.54	13.62	28.59	45.12
1967-1968	36.17	47.88	60.10	13.37	26.85	42.47
1968-1969	27.68	38.10	50.05	17.93	29.84	43.97

The less than $3000 grade for primary production behaves in a similar manner to the less than $2000 grade, with the reduction in proportions over the period being about 16·5 per cent. For wholesale-retail traders the proportion fell every year, the overall fall being about 16 per cent.

Overall the picture is of a decline in the proportion of members of both groups earning low incomes though there is some suggestion that this decline may have halted in the case of primary producers after 1963-64. Unfortunately the increased instability of primary producer incomes in the latter half of the period under study has masked the underlying trend somewhat.

The distribution of income for both industries is skewed to the right, with a stable proportion (approximately 65 per cent) earning less than the mean income. The skewness in the distribution detracts from the usefulness of average income as a basis for comparison. In Table 4 the quartiles for both industries are shown. For the wholesale-retail traders the median income at the start of the period is about $1100 below average income. This gap widens progressively to $1700 at the end of the period. The median and upper quartile show an upward trend. The lower quartile however, while increasing in all but three years, is only $200 higher at the end of the eleven years.

TABLE 4

Quartile Income Distribution 1958-1959 to 1968-1969

Year	Primary Producers			Wholesale-Retail Traders		
	Medium $	Lower $	Upper $	Medium $	Lower $	Upper $
1958-1959	2,058	1,034	3,791	2,468	1,384	4,325
1959-1960	2,403	1,217	3,859	2,552	1,390	4,561
1960-1961	2,579	1,336	4,726	2,623	1,423	4,678
1961-1962	2,481	1,231	4,585	2,678	1,430	4,839
1962-1963	2,822	1,431	5,345	2,686	1,401	4,886
1963-1964	3,366	1,666	6,389	2,779	1,394	5,113
1964-1965	2,961	1,275	5,695	2,955	1,510	5,445
1965-1966	2,702	953	5,347	3,118	1,596	5,694
1966-1967	3,206	1,325	6,008	3,376	1,760	6,030
1967-1968	2,173	691	4,837	3,590	1,862	6,472
1968-1969	2,995	903	6,023	3,500	1,593	6,491

For primary production the median at the start of the period is about $1000 below average income. This gap also widens and at the end of the period is $1700. Both the median and upper quartile appear to increase to 1963-64 and are roughly comparable with wholesale-retail traders to 1966-67. The lower quartile shows the same variability as the other quartiles, but the overall picture here seems to be one of decline, and the final figure is $200 below the starting figure.

For welfare purposes a poverty line income of $2000 in 1962-63 is chosen.[13] This is the figure which was used by McKay [4] and no attempt is made to justify it here. As it is relative poverty, not absolute poverty, we are referring to, the figure of $2000 is adjusted to allow

[13] Though McKay does not state the particular year for which he thinks $2000 is a poverty income his data covers the period 1958-59 to 1963-64.

for growth in income per head and for price changes. That is, for years before 1962-63 the poverty line income is reduced by 2 per cent per year[14] and, for years after the poverty line is raised by 2 per cent. These new incomes were then multiplied by the consumer price index with base 1962-63 to give the adjusted poverty line incomes. The poverty line income for each year along with the proportion earning less than this income are shown in Table 5. For both industries, the proportion earning less than poverty income was in excess of one-third for nearly all years, the exception being primary production in 1963-64 when the proportion was just below one-third at 31.05 per cent. The proportion for primary production exhibits no apparent trend but is on average about 4 per cent higher than the proportion for wholesale-retail traders and tends to be more unstable. For the latter industry the proportion is less random in its movements and in general appears to be increasing.

TABLE 5

Percentages of Primary Producers and Wholesale-Retail Traders Earning Less than Poverty Line Income for years 1958-1959 to 1968-1969

Year	Poverty Income $	Percentage Earning less than Poverty Income	
		Primary Producers	Wholesale-retail traders
1958-1959	1845	41.97	33.73
1959-1960	1883	38.11	34.74
1960-1961	1921	37.52	36.14
1961-1962	1960	40.55	36.63
1962-1963	2000	35.98	37.63
1963-1964	2040	31.05	37.48
1964-1965	2081	38.15	36.64
1965-1966	2123	42.26	36.69
1966-1967	2165	39.20	35.38
1967-1968	2208	54.48	35.28
1968-1969	2252	45.96	39.14

Conclusion

The main purpose of this paper has been to present two adjustments which might be made to taxation data in order to obtain more realistic estimates of the distribution of primary producer incomes. While being based on some assumptions which may appear a little tenuous, the indications are that the estimates obtained are not unreasonable and that a useful supplement to other information on farm incomes is available.

Comparison of the adjusted series for primary producers with a similarly adjusted series for wholesale and retail traders was a secondary purpose of the paper. An important conclusion from this comparison is that farm incomes were considerably more variable over the eleven year period 1958-59 to 1968-69 and that this variability increased toward the end of the period.

There was not much difference between the two income series though it is possible that, while the series on wholesale and retail traders

[14] Two per cent being about the average rate of growth of real income per head.

follows an upward trend throughout, the primary producer series is climbing at a slower rate or has flattened out. Unfortunately, the extreme variability of the primary producer series makes generalization difficult. However, in their limited way the results support the more general conclusion advanced by Glau [3], that the agricultural sector has been able to maintain its income with the possibility of having enjoyed some slight growth, but that incomes in other sectors, in this case the wholesaling and retailing sector, have increased at a faster rate.

The distribution of income for the wholesale and retail traders appears to be improving inasmuch as there is some movement out of the $2000 to $3000 income grade to higher grades but the proportion earning less than the mean income remained constant at about 65 per cent. For primary producers the distribution changes in an erratic manner but again the proportion below the mean income remains roughly at about 65 per cent.

For welfare considerations $2000 in 1962-63 was used as a poverty line income which was adjusted for price change and growth in income per head. This arbitrarily chosen income may be considered too high but, even if reduced, two conclusions will still hold. One is that the difference between the proportions in each industry earning less than the poverty income remains small and the other is that there appears to be, in the less than $1000 bracket, a group who can neither raise their income nor move out. This group is large enough to constitute a considerable welfare problem and few would argue against a $1000 income being regarded as representing poverty.

Finally, while there is some slight evidence of a relative deterioration in the position of primary producers, these aggregate figures do not support the suggestion that the population of primary producers in Australia contained a disproportionately large number of low income families, at least over the period of study. This does not deny that there are pockets of poverty in agriculture. It merely suggests that agriculture cannot be regarded as a special case. Analysis of more disaggregated data covering a wider range of occupations would throw better light on the pattern of poverty in agriculture and in the society as a whole.

APPENDIX

Year	No. of Partners per Partnership		Proportion of Partners in Industry	
	Primary Producer	Wholesale-retail traders	Primary Producer	Wholesale-retail traders
1958-59	2.33	2.20	0.61	0.77
1959-60	2.33	2.20	0.64	0.79
1960-61	2.33	2.20	0.67	0.80
1961-62	2.33	2.20	0.69	0.81
1962-63	2.34	2.21	0.72	0.81
1963-64	2.35	2.21	0.74	0.82
1964-65	2.35	2.21	0.76	0.82
1965-66	2.33	2.20	0.77	0.82
1966-67	2.33	2.21	0.77	0.83
1967-68	2.33	2.21	0.78	0.85
1968-69	2.39	2.37	0.80	0.87
1969-70	2.33	2.20	0.80	0.93

The 19 income grades used for adjusting for income splitting are as follows: $<$ \$417, 417–599, 600–799, 800–999, 1,000–1,199, 1,200–1,399, 1,400–1,599, 1,600–1,799, 1,800–1,999, 2,000–2,199, 2,200–2,399, 2,400–2,599, 2,600–2,799, 2,800–2,999, 3,000–3,999, 4,000–5,999, 6,000–7,999, 8,000–9.999, $>$ 10,000.

References

[1] Commissioner of Taxation: *Taxation Statistics, 1959-60 to 1969-70;* Supplements to the Fortieth to Forty-eighth Reports to Parliament.

[2] Commonwealth Bureau of Census and Statistics: Census of Retail Establishments and Other Services, Year ended 30th June, 1957 and 1962. Bulletin Nos. 9 and 1, Canberra, Australia.

[3] Glau, T. E. 'The Cost-price Squeeze on Australian Farm Incomes', *The Australian Journal of Agricultural Economics,* Vol. 15, No. 1, pp. 1-19 (April 1972).

[4] McKay, D. H., 'The Small Farm Problem in Australia', *The Australian Journal of Agricultural Economics,* Vol. 16, No. 2, pp. 115-132 (December 1967).

[5] Powell, R. A., Musgrave, W. F. and Wilson, R. L. K. An Input-Output Series for Australian Agriculture, 1920-21 to 1969-70. U.N.E. Mimeograph, 1973.

[6] Wells, J. M. and Bates, W. R., 'Changes in Farm Business Organisation in Australia', *Quarterly Review of Agricultural Economics,* Vol. XXII, No. 2, pp. 53-65 (April 1969).

[7] Wells, J. M. and Bates, W. R., 'A Note on Some Implications of Family Partnership Formation for Farm Income Comparisons', *Quarterly Review of Agricultural Economics,* Vol. XXII, No. 3, pp. 140-146 (July 1969).