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Income Equalisation Deposits: Enhancing Farm Viability

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In this paper it is argued that liquidity is an important determinate of farm viability. This is particularly so with a rural sector which suffers large variations in income and has a business cycle which typically extends for several years. Present tax arrangements, coupled with a desire by producers to minimise tax, means that surplus cash in high income years is mostly invested in further improvements, developments or capital equipment. An enhanced Income Equalisation Scheme could play a significant role as a risk management tool for producers as well as reducing calls for government assistance during periods of adversity. Suggestions are made for improving the operation and delivery of the scheme including amalgamating Farm Management Bonds and the Income Equalisation Scheme into one scheme operated by financial institutions under an agency agreement.

1. Background

Westpac sees very significant benefits for the rural sector in having an Income Equalisation Deposit scheme (IED)¹ which operates as a risk management tool for primary producers by allowing them to deal more effectively with fluctuating incomes which are a result of climatic and commodity cycles. The risk management attributes of the Scheme are the main reason for Westpac support of such an arrangement.

The present system of income tax averaging reduces the problems of period inequity for farmers. The fact that it does not completely eliminate these problems is reflected in part by the existence of an IED scheme, although it is recognised that the scheme is primarily concerned to achieve greater efficiency in the farm sector and better risk management. However, while the IED scheme has met the needs of some farmers, overall experience with it has been disappointing:

 According to the Department of Primary Industries and Energy (DPIE) data, funds invested at 15 December 1994 in IEDs and Farm Management Bonds (FMBs) amount to only \$125 million, or less than one percent of annual cash costs of the rural sector. That there are fewer than 7000 IED and FMB accounts makes it clear that only a small proportion of farmers use the IED scheme.

It is evident that a considerable number of producers have not been able to prepare themselves financially to handle the current drought. Whether through lack of knowledge or because of the terms on which they are available, IEDs have apparently not been seen as relevant to the needs of the majority of farmers. As a consequence, calls by them for new or short-term financial support have been strident and continue unabated.

Westpac's experience is that in high income years producers tend to invest surplus funds in property development or capital equipment. Such investment decisions are often not based on financial considerations of optimum replacement strategies but are driven by considerations of tax, the size of the crop or commodity prices.

However, not only are such investments often of little use when producers are faced with poor commodity prices, drought or natural disasters, but they mean farmers do not have other non-farm income or assets they can draw on to meet the day-to-day needs in these circumstances.

Our experience is that farmers who hold a reasonable level of liquid assets tend to be better credit risks and are able to deal more effectively with the cyclical rural fluctuations. Moreover, these farmers are the ones who can contribute to a stronger rural sector which has less need for government support in difficult times.

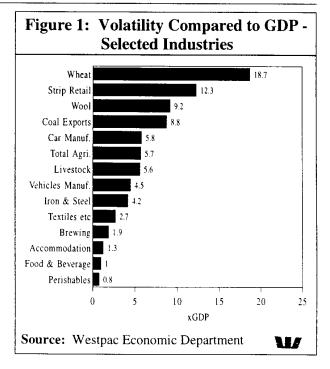
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¹ The term IED in this paper is often used generically to include Farm Management Bonds.

2. Financial Characteristics of the Rural Sector

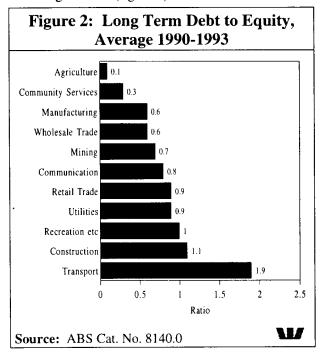
To understand the risk management needs of farm businesses it is necessary to have a profile of their financial characteristics, as well as a comparison to other industries. Farming is generally characterised as 'asset rich cash flow poor'.

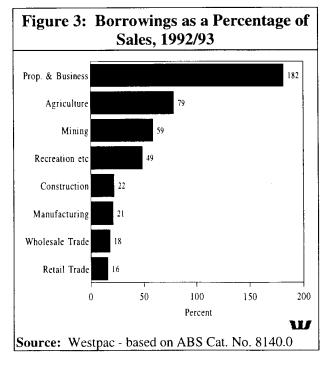
In 1992-93 with a total investment of \$111 billion there were sales of \$20 billion. As a ratio of sales to assets, at 19 per cent this is the lowest of all Industries apart from the Finance and Insurance Industry at 2 per cent. The latter works off small commissions in relation to investments made and is not directly comparable (table 1).



Industry	Management Units No.	Return on Assets %	Return on Net Worth	Long Term Debt to Equity	Interest Coverage Times	Sales/ Management Unit \$'000	Assets/ Management Unit \$'000	Ratio Sales to Assets
Agriculture, Forestry, Fishing and Hunting	111 182	3.0	3.5	0.1	3.2	187	1 002	19
Mining	1 537	9.3	20.5	0.8	4.9	20 466	39 588	52
Manufacturing	29 270	7.6	18.0	0.5	4.8	5 478	4 904	117
Electricity, Gas and Water	623	2.6	4.8	0.7	1.6	39 559	147 061	27
Construction	50 695	8.7	44.2	2.0	3.7	806	470	198
Wholesale Trade	33 742	4.8	15.2	0.7	2.6	4 448	2 450	182
Retail Trade	84 866	9.3	31.5	0.8	2.9	1 702	491	347
Transport and Storage	19 526	2.5	7.1	1.2	1.9	1 841	2 637	70
Communication	172	7.6	16.0	0.6	3.3	86 703	161 116	54
Finance and Insurance	19 283	2.5	9.7	N.A.	1.7	875	42 913	2
Property and Business Services	80 200	2.6	6.9	0.9	1.6	508	1 932	26
Community Services	49 374	7.9	12.6	0.3	5.4	414	702	59
Recreation, Personal and other Services	50 002	7.0	20.7	1.1	2.7	738	739	100

Variability of income is an important issue with farm businesses and is a major source of risk to the business. ABARE has reported in the Farm Surveys Report 1994 on the variability of income in the wheat and other crop industry and shown how it varies across regions (Stanford, et al.). This variation across regions would also occur in other agricultural industries as well as between agricultural industries. When comparing the variability of certain agricultural industries to selected industries it is clear there is significant variability within agriculture (figure 1).





In order for agriculture to survive it must maintain a low level of debt. Compared to other industries it has the lowest level of debt to equity (figure 2), but despite this has relatively high debt to sales (figure 3).

3. Risk Management

From Westpac's point of view, the importance of risk management cannot be underestimated and if there are facilities available that will enhance the management of risk then farmers need to make use of them. The use of the facility needs to be risk driven and not tax driven.

In recognising the importance of risk management, Westpac has worked to offer farmers a variety of ways to better manage risk associated with their business. As Powell and Wright have stated, the capacity to manage the impact of current performance on reserves available to meet future performance, influences the survival potential of a farm. The flexibility of financial packages available to farmers is an important determinant of this. Accordingly there are now many financing options which provide for management of liquidity and as such improve risk management for the business. The alternatives include bank loan products which can be used as de-facto income equalisation deposits. These loan products allow principal repayments to be made in advance of the agreed repayment schedule. These additional payments over and above the agreed repayments form a buffer which can be re-drawn if there is a requirement for the cash. The buffer forms a liquid reserve for the business. As with any principal repayments, the additional repayments have no tax advantage but they will reduce the interest cost.

Other alternatives such as fixed rate lending or bill options help to smooth the expenses incurred by the business. These have the potential to reduce the demand on liquid reserves as well as allow for more accurate forward planning because some of the expenses are known in advance.

It is considered that there is a need for only one deposit scheme which works to improve the risk management ability of the farm business. The IED and FMB schemes could be rolled into one. Indeed the dividing lines between the two have become blurred with the IED's in recent times having been promoted generally as a means of managing fluctuating incomes rather than addressing tax equity. The goal of the FMB scheme in attempting to address the risk management

problems of fluctuating incomes is supported but it is considered the conditions are too restrictive.

Fluctuating farm incomes, which are a feature of agriculture world wide, challenge the viability of a farm business when the fluctuations force down the level of liquid reserves. It is well understood that liquidity is a key to farm viability along with the other criteria such as solvency. From Westpac's point of view, liquidity is significant in that this is where the interest is serviced and the principal repaid.

As some would say, 'cash is king'. Cash will meet the transactions and obligations as they fall due as well as enabling unforseen positive or negative opportunities to be met. It is important to have a reserve of liquid assets of cash or cash equivalents available for the business to be ready to act and provide investment flexibility. Clearly there are many forms in which these liquid assets can be held such as cash, shares, investment deposits, IEDs and FMBs. It is accepted there may be an opportunity cost for holding liquid assets rather than making a capital investment or even a real cost such as income tax, however there will also be costs as a result of not having liquid assets available to cover the unforseen events.

In terms of risk management for farm businesses it is preferable to have reserves of cash, cash equivalents such as shares, investments off farm such as real estate or even off farm cash generating businesses. Some may argue it is more advantageous for the business to invest surplus cash into capital that will complement existing investment and provide a higher return rather than maintain cash reserves or IEDs. Given that the risks associated with farm businesses will vary depending on the industry, the state and the size of the average income it would be unwise to discount the value of liquid reserves entirely. There will always be a need for these reserves especially when the average farm income is low, less than \$100 000, and the variability is greater than 0.5 coefficient of variation (Stanford et al.).

The importance of holding a level of liquid assets in any business is well understood. Various research reported in the financial journals has examined the significant characteristics of firms which can classify a business as one which has a high probability of failure or not. The two most common indicators identified are those attributed to solvency and liquidity.

Studies in this field which relate specifically to agriculture (Reinsel; Johnson; Bauer and Jordan; Evans; Johnson and Hagan; Dunn and Frey; Hardy and Weed) are not common but of those, a majority reported the significance of liquidity for the survival of the farm business. On the Australian scene Culpitt of the Queensland Department of Primary Industries is currently researching viability indicators for rural industries in Australia.

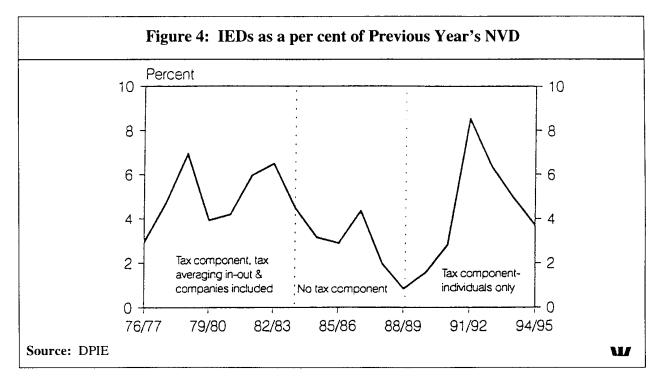
The Rural Adjustment Scheme also recognises the importance of liquidity. One of the characteristics of farm businesses approved for Rural Adjustment Scheme assistance was inadequate liquid assets which could be used to overcome short term income loss or improve or diversify their operation. One of the characteristics of those farms declined assistance, because they were assessed as not in need, was a much higher level of liquid assets than these granted assistance (Gleeson *et al.*).

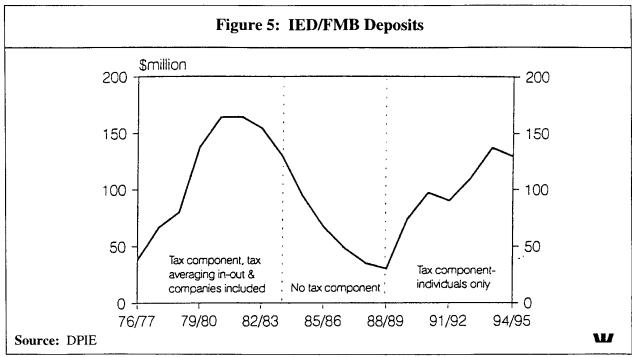
As well, Peterson and Moon in their report on off-farm wages and salaries for farm families reported that off-farm income is an important risk management tool that can increase stability and reduce downside risk. The off farm income is achieving this by improving the liquidity of the household. Similarly, IEDs have a role to play as a means of preserving the liquidity of the business.

4. Use of IEDs

The history of the usage of IEDs and how this relates to the net value of production and different tax treatments is illustrated in figures 4 and 5. A distribution of the deposits is made in table 2. As at 15 December 1994 the balance of deposits held in IEDs was \$112.2 million and in FMBs \$13.0 million.

Clearly, farmers have voted with their cheque books by keeping them closed when it comes to the IED/FMB scheme. The dislike, distrust or irrelevance of the deposit scheme was also reported by Tapp et al., where groups of farmers, farm advisers and accountants were canvassed for risk management strategies in respect to drought. The strategies suggested were mainly on-farm tactics with off farm investments receiving some mention while IEDs were not specifically raised.





The usage of IEDs has been small and presumably for a variety of reasons. Has there been a change of attitude toward savings so that people are more confident about converting cash into capital or consumables for the business rather than risk any erosion in value while the cash is in a savings account or a short term deposit? Have accountants been successful in minimising tax for their clients in the way that cash reserves are spent? Perhaps it is the 'wait and see' attitude of

farmers who ordinarily prefer to delay for a couple of years in order to observe a new technology, crop or even investment scheme rather than take up the innovation immediately. In the case of the IED scheme, is it that past rule changes and therefore possible changes in the future have made farmers less confident about the scheme. As the rules continue to change they write off the scheme as being unreliable and search for other ways to manage risk and tax. Westpac believes that

Scheme	Range	Number of Farmers	Value of Deposits
Income Equalisation	≥\$300 000	16	\$4 800 000.00
Deposits	>\$250 000	27	\$7 781 900.00
	>\$200 000	59	\$15 319 898.89
	>\$150 000	89	\$20 614 741.55
	>\$100 000	176	\$31 568 054.11
	>\$50 000	460	\$52 083 495.25
	>\$25 000	1,194	\$79 659 512.53
	<\$25 000	2,631	\$32 549 828.22
Farm Management Bonds	≥\$80 000	20	\$1 600 000.00
	>\$50 000	56	\$3 857 335.48
	>\$25 000	161	\$7 664 552.06
	≤\$25 000	443	\$5 378 836.76

neither bank managers nor customers have a reasonable understanding of the aims and mechanics of either the IED or FMB schemes.

It would be helpful to have a study examine why the Scheme is used by so few farmers and whether more farmers would use a revised scheme. This should help the government introduce a more acceptable scheme that has a high rate of utilisation.

A goal of minimising tax can see financial efficiency compromised by expenditure replacing capital before the optimum holding period has expired. Risk management can also be compromised by using surplus cash to purchase supplies for the next tax year or make a tax induced investment that reduces the liquid reserves. This can end up in a situation where tax is reduced but risk increased.

It seems that in high income years many farmers invest surplus funds until they drive taxable income down to a level which will just allow them to meet their personal requirements. In this situation it could be argued that an effective IED scheme would not lead to further loss in tax revenue for the federal government as producers would merely change investment patterns.

A more attractive IED scheme coupled with financial advice based on risk management and financial effi-

ciency rather than tax minimisation should see a greater uptake of IEDs.

In October 1994 the Prime Minister met with the banks and pastoral houses to discuss measures that might be taken to alleviate the impact of drought. As a result of that meeting Westpac presented a submission to the Federal Government proposing several modifications to the IED scheme with the intention of making it more responsive to the needs of farmers by improving their ability to manage risk and to withstand cyclical downturns and in turn enhance the viability of the farm business.

The remainder of this paper cover extracts from and recommendations included in the submission.

5. Proposals for Change

Westpac along with many others including the Australian Bankers Association (ABA), NFF, NSWFA, NSW Agriculture and other producer groups have all been lobbying the Government to make changes to the IED Scheme. The recent Senate report, Rural Adjustment, Rural Debt and Rural Reconstruction, recommends changes as did the 1992 report, A National Drought Policy.

5.1 Development and Marketing of IEDs by Financial Institutions

There is a long history in Australia of banks acting as agents for government in disbursing funds under different government programs. This practice reflects a recognition that financial institutions have the necessary skills to implement such programs more cost-effectively than government. This proposal has the support of farmer organisations such as the Pastoralist and Graziers Association of WA (PGA) and the WA Farmers Federation (WAFF). It is also supported by the Senate Report referred to above.

In the case of IEDs, using financial institutions as agents would provide a number of specific advantages for the government:

- (a) The scheme would be actively marketed in the rural community in the context of other facilities which financial institutions provide to the rural sector. This would lift the profile of the scheme above that which DPIE, as the administering agent at present, can realistically be expected to achieve without a large advertising budget. The 'reach' of the scheme would thus be considerably expanded.
- (b) Major banks are progressively implementing integrated financial management for farmers, addressing cash flow, farm development and risk management. IEDs are an integral part of any program with these objectives and can be marketed as one component of a package.

At present, a great many farmers who would benefit from investing in IEDs do not do so. To the extent that financial institutions encourage farmers to invest in IEDs where they have clear need for such a facility, we would expect the take up of IEDs to be significantly greater.

- (c) Farmers are likely to be more comfortable discussing their need for IEDs with their local banker who understands their overall financial position, than with a public servant who has no such understanding and who, because of location, is not readily accessible.
- (d) At present, the government's understanding of attitudes of farmers towards IEDs is mainly based on anecdotal comment and the limited

information available from the small minority of farmers who actually have IEDs. However, financial institutions regularly review market reactions to their products and are thus in an excellent position to provide quick, broadly-based and accurate feedback on the effectiveness of the scheme.

- (e) If financial institutions are responsible for marketing IEDs, competitive market forces will inevitably see the development of new IED products. These might include, for example,
 - zero coupon deposits where a security is issued at a discount and redeemed at full face value at the end of, say three years;
 - compound interest deposits; and
 - deposits with interest payable quarterly or half-yearly.

Obviously the precise form of any IED products would depend on the nature of any conditions laid down by the government and on market research as to the likely appeal of a product to farmers. Thus, if the government considered it desirable, an IED could even be rolled over, with appropriate tax treatment, into a superannuation fund if the farm is sold or the farmer retires.

Westpac believes that the present restriction on the use of IEDs as collateral by farmers should not be removed, as this would create the potential for tax abuse.

Having regard to the above considerations and the fact that the government has used financial institutions as agents in the past and continues to do so, Westpac recommends that:

- (a) financial institutions be authorised to accept and hold deposits under a revised IED scheme; and
- (b) an agency agreement be developed setting out obligations to which participating institutions would be required to subscribe. This would lay down requirements with regard to such issues as the definition of a *bona fide* primary producer, the investment component of an IED (but see below), the minimum period for holding deposits, and arrangements for the collecting of withholding tax, reports to the Australian Tax Office etc.

5.2 Improvements to the IED Facility

(a) IEDs are intended to provide a tax-effective instrument to enable farmers to optimise saving and expenditure decisions in high income years. However, interest is only paid on the investment component of 61 per cent in the case of IEDs and 80 per cent in the case of FMBs (although it is recognised that the investment component for FMBs will increase to 100 per cent after 1 July 1995 once the necessary legislation has passed).

Westpac recommends that interest be paid on the full amount deposited in the year of lodgement. This means, in conjunction with other recommendations below, collapsing the IED and FMB schemes into a single scheme.

Not only would this simplify the scheme administratively, but Westpac believes that payment of interest on the full amount of the deposit is unlikely to involve a significant loss of revenue for the government. This is because the alternative expenditure decisions in high income years are themselves tax-driven.

If further analysis indicates that there is a larger than expected loss of taxation revenue, then the government could charge financial institutions an agency fee based on usage to offset revenue foregone. However, in determining the desirability of such a fee, two factors need to be considered:

Some or all of the fee would inevitably be passed on to depositors by way of a lower yield, which would reduce the attractiveness of the scheme. Competitive conditions would have a major bearing on the extent to which this happened.

A key objective of IEDs is to prevent the need for government financial support for the farm sector in a crisis situation, support which could be more costly than the revenue generated by such a fee.

(b) Tax deductibility of deposits currently exists for IEDs and was reconfirmed for FMBs in the December Drought Package Statement. Westpac recommends the 100 per cent tax deductibility of deposits in the year of deposit continue with the enhanced deposit scheme. c) At present, withdrawals of FMBs are conditional on hardship arising from natural events and low commodity prices. These conditions require assessments — currently by DPIE staff — increasing administrative costs and involving discretionary decisions. It is probable that the uncertainty this creates in the minds of farmers discourages many of them from making use of the scheme.

The fact that withdrawals are assessable should act to discourage perverse withdrawals at times other than real need. The aim is to enhance risk management for the business. Given that risk expresses itself in different ways, business and financial, then to limit withdrawals is to limit flexibility of this risk management tool. Therefore Westpac recommends that the conditions on withdrawal be removed.

- (d) The Drought Package Statement also announced that the 20 per cent withholding tax payable on FMBs would be removed. This should make the FMBs more attractive, however in the improved deposit scheme, Westpac recommends that all withdrawals are included as taxable income in the year of withdrawal. This is in line with review of the IED scheme by Douglas and Davenport and the PGA recommendations.
- (e) The ceiling on cumulative deposits of \$300,000 is discriminatory against larger farm businesses. Using data from the Australian Bureau of Statistics 1992-93 Agricultural Industries Financial Statistics report, it can be assumed that about 22–27 per cent of farm establishments have had a cash operating surplus exceeding \$50 000 in each of the last 3 years. This is a surplus after all expenses including personal but before income tax.

It represents money available for investment including deposit in the risk management deposit scheme. The \$300 000 limit appears constrictive in terms of these surpluses. (These 22–27 per cent of farm establishments also represent 50 per cent of farm turnover).

The revision of \$150,000 per tax payer for the FMB's as announced in December is also limiting. Westpac recommends the limits on deposits

- be replaced with a mechanism which is related to gross income or turnover.
- (f) At present, the interest rate is pegged to a specific government bond rate. Westpac recommends that the interest rate should be set by financial institutions in a competitive market environment. The size of the investment component and any agency fee as well as the administrative work associated with any conditions which are retained will all have a bearing on the rate.
- (g) The modifications proposed to the scheme could readily be presented as a fresh government initiative and attract a much higher profile in rural communities if it were renamed. A name such as Risk Management Account (RMA) or Farm Management Deposits scheme would highlight the relevance of the scheme to efficient farm management.

6. Conclusion

The IED scheme, as presently structured and administered, is demonstrably not meeting the needs of farmers. Nor has it enabled the government to achieve its objective to help farmers manage risks and prepare for drought or cyclical downturns.

Westpac strongly believes that changes to the IED scheme along the lines proposed will have major advantages for farmers and the government and at minimal or no cost to taxation revenue. The changes provide the opportunity to put in place a program which will contribute to the long term viability and stability of the rural sector and, in so doing, reduce the demands for government financial support from farmers in times of crisis.

References

AUSTRALIAN BUREAU OF STATISTICS (1992-93), Agricultural Industries Financial Statistics, AGPS, Canberra.

- An Enquiry into the Rural Adjustment Scheme, Senate Standing Committee on Rural Regional Affairs, Canberra, 1995.
- A National Drought Policy, Senate Standing Committee on Rural and Regional Affairs, Canberra, 1992.
- BAUER, L.L., and JORDAN, J.P. (1971),"A Statistical Technique for Classifying Loan Applications", *University of Tennessee Agricultural Experience Station Bulletin 476*, March.
- DUNN, D.J., and FREY, T.L. (1976), "Discriminant Analysis of Loans for Cash/Grain Farms", *Agricultural Finance Review* 36, 60-66.
- EVANS, C.D. (1971), An Analysis of Successful and Unsuccessful Farm Loans in South Dakota, Economic Research Services, United States Department Agriculture, February.
- GLEESON, P.A., BALL, K., KOKIC, P., and MOON, L.J. (1992), "Characteristics of Rural Adjustment Scheme Applicants in 1990-91, *Agricultural and Resources Quarterly* 4(2), 232-241.
- HARDY, Jr., W.E., and WEED, J.B. (1980), "Objective Evaluation for Agricultural Lending", Southern Journal of Agricultural Economics 12, 159-164.
- JOHNSON, R.B., (1970), Agricultural Loan Evaluation with Discriminant Analysis, PhD Dissertation, University of Missouri, 1970.
- JOHNSON, R.B., and HAGAN, A.R. (1973), "Agricultural Loan Evaluation with Discriminant Analysis", Southern Journal of Agricultural Economics 5, 57-62.
- PETERSON, D. and MOON, L. (1994), "Off Farm Wages and Salaries for Family Farms", ABARE Farm Surveys Report.
- POWELL, R. and WRIGHT, V. (1987), "Financial Deregulation and Risk in Farming", Presented to Australian Agricultural Economics Society Conference, Adelaide, February.
- REINSEL, E.I. (1963), Discrimination of Agricultural Credit Risks from Loan Application Data, PhD Dissertation, Michigan State University.
- STANFORD, L. PROCTOR, W. and WRIGHT, J. (1994), "Wheat Farming Risk" ABARE Farm Surveys Report.
- TAPP. N., MILHAM, N., DOUGLAS, R.A, and HADLEY, J. (1995), "A Stochastic Analysis of Selected Drought Prepardness Strategies in NSW", Paper presented to the 39th Annual Conference of the Australian Agricultural Economic Society, University of Western Australia, Nedlands, 13-16 February 1995.