*Australian Journal of Agricultural Economics*, Vol. 20, No. 2 (August 1976), pp. 123-124.

# AN ECONOMIC ALTERNATIVE TO CONCESSIONAL FARM INTEREST RATES: REPLY

C. B. BAKER
*University of Illinois*

I am grateful for the opportunity to clarify the content on page 182 of my article [1]. It may have failed to communicate with others as it appears to have with Groves and Turnbull [2]. The debt reserve plan is intended to induce more long-term lending whilst reducing reliance on concessions in farm mortgage interest rates. The arithmetic in the article is designed to indicate that this can be accomplished with little damage to the borrower in terms of direct effects.

The statistical results in Table 8 [1] show that in 6 of the 15 years simulated, the net cash flow (NCF) under the debt reserve plan (DRP) failed to reach the budgeted requirements, as opposed to 9 years under the conventional plan (CP). Moreover failures would repeat in succeeding periods, under the CP. Under the DRP, no failures would occur, given the data of the example. In the 15 years reported the variance of NCF under the DRP was reduced to 90 per cent of the variance of NCF under the CP.

As indicated by Groves and Turnbull the borrower under CP could invest surpluses in years where cash flow exceeds CP amortization requirements. If the earnings exceed the rate the DRP requires the lender to pay the borrower, the CP clearly would generate a higher annual average and cumulation of NCF. They assumed an earnings rate of 14 per cent for surpluses and a penalty rate of 9 per cent for deficits. It is clear that CP generates superior results under these assumptions.

However, the critical point is that CP loans do not seem to be made available under current conditions, in the absence of concessional interest rates. It is debatable whether the DRP would suffice to induce such loans. On the other hand, the DRP clearly reduces risk *for the lender*. Hence, *ceteris paribus*, the DRP alternative is more likely than the CP alternative to produce a supply of non concessional farm mortgage loans.

Finally, returning to page 182 [1] the positive effects *for the borrower* lie principally beyond the arithmetic in the article. Given a more secure financial condition, one might expect less costly risk management in production and marketing. And presumably he would face less stringent credit constraints, under DRP. Preliminary work, using the modelling suggestions of the Appendix [1] indeed indicates that these results are offsetting when DRP is compared with CP [3].

## *References*

[1] Baker, C. B., 'An Economic Alternative to Concessional Farm Interest Rates', *The Australian Journal of Agricultural Economics*, 18:3 (December, 1974), pp. 171-192.

[2] Groves, John S. and Elwin D. Turnbull, '. . .: Comment,' *The Australian Journal of Agricultural Economics*, 20:2 (August 1976), pp. 119-122.

[3] Stone, Kenneth E., *Effects of a Variable Amortization Payment Plan on the Financial Organization of Illinois Cash-Grain Farms*, unpublished Ph.D. thesis, University of Illinois, Urbana, 1976, 213 pp.