NONPRICE RATIONING OF AGRICULTURAL CREDIT BY TWO TRADING BANKS

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The nonprice mechanism used by the trading banks to ration credit among farmers was studied using a survey designed along the lines of a factorial experiment. Of the farmer characteristics studied, managerial ability emerged as being most important in affecting the amount a farmer could borrow. Banking history and, to a lesser extent, security were also influential. However, the research indicated that there is great variability in the amounts that individual bank managers are prepared to lend.

Introduction

In a perfectly competitive capital market, interest rates would move in accordance with the supply of and demand for loanable funds. To be more precise, there would be a family of related interest rates with the longer term and more risky loans generally commanding the higher rates. These interest rates would ultimately be determined by the borrowing and/or lending behaviour of individuals and institutions participating in the market. These participants would arrange their borrowing and lending portfolios to maximise utility expressed as a trade-off between expected returns and risk, discounted by a time preference rate (Sharpe 1970).

Such a perfectly competitive capital market rarely exists. In most countries, interest rates are constrained by monetary policy instruments of governments, and are frequently directly constrained by usury laws. These restrictions on interest rates mean that increased emphasis is placed on nonprice factors associated with the borrowing and lending of funds.

The purpose of this study is to examine the behaviour of two trading banks in an attempt to gain an understanding of the importance of different nonprice factors in influencing trading bank lending. Knowledge of the behaviour of lenders might be used to assist farmers individually to make better resource allocation decisions involving credit use (Baker 1968). It might also be used in devising public policy designed to influence lenders' decisions.

No attempt has been made in this study to ascertain whether the behaviour of lenders to the agricultural sector differs from that toward other sectors of the economy. Little is known about how lenders allocate loanable funds between the various sectors (Arndt and Stammer 1973, p. 62).

Methods

Projective interviews

A series of studies on the behaviour of lenders in allocating credit to farmers has been conducted at the University of Illinois, commencing in

* The authors wish to acknowledge the helpful suggestions given by Keith Campbell, Bruce Davidson, David Pedersen and various reviewers.
the late 1950s (e.g. Irwin 1961; Irwin and Baker 1962; Newmann 1963; Rogers 1963; Smith and Baker 1969). A projective interview technique (Oppenheim 1968, pp. 160–92) was developed as a survey instrument in an attempt to derive credit profiles for hypothetical (but plausible) farm borrowing situations. These techniques involved the interviewer playing the role of a farmer and personally making a series of loan applications which were backed by hypothetical farm situations and farm plans (Irwin 1961).

The studies showed that there was considerable variation in the amount different lenders were prepared to offer for a given loan proposal. They also suggested that lenders ration credit among potential borrowers according to loan purpose, type of agriculture practised, the borrower’s character, his capacity to repay a loan, and the asset structure of the farm business. The studies were not designed to determine the relative importance of these factors nor, indeed, whether they were statistically significant in determining the loans offered.

The preliminary lender survey

In the present study, an attempt was made to use the same projective interview technique and survey methods to identify the factors considered by lenders in appraising rural loan proposals in New South Wales. The institutions surveyed included trading banks, pastoral finance companies, insurance companies, finance companies, trustee companies, merchant banks and government instrumentalities. Hypothetical loan proposals for three different agricultural industries (dairy, wheat and sheep) were presented to the head office of each of these institutions for appraisal. Each loan proposal was based on an actual farm situation using data collected in a survey conducted in the initial stages of the project. All information needed for analysis was contained in each hypothetical loan proposal.

As far as the trading banks were concerned, several factors emerged from the lender surveys as having an effect on loans offered to farmers. These factors included the following:

(a) the availability of funds for lending;
(b) the banking history of the borrower, and his associated banking connections;
(c) the standard of property management;
(d) the nature of farm organisation;
(e) the future prospects of relationships between the bank and the borrower;
(f) the borrower’s character and reputation;
(g) the profitability of the program;
(h) the viability of the program; and
(i) the security to be offered the lender.

Only one observation for each farm type was taken from each institution (at the head office level). Thus the data could not be used to

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1 The credit profile is a table of sources and uses of credit, which includes possible interactions between various sources and various uses. These interactions can be important. For example, in the Australian context, this would mean that farmers would need to consider the effects of obtaining carry-on finance from pastoral finance companies on their ability to obtain loans from trading banks for land purchase.
determine either the relative importance of the factors or how they were quantitatively related to the farmer's ability to obtain credit.

**Survey of trading banks**

A survey designed as a factorial experiment was conducted with two trading banks. The purpose of this survey was to quantify the relationships between some of the nonprice factors identified in the preliminary lender survey as affecting the loans offered to farmers.

The trading banks were selected for this study for two reasons. First, the trading banks are the most important source of credit to the rural sector (BAE 1977). Second, the trading banks, with their extensive branch banking systems, provided scope for several of the nonprice factors that influence a farmer's ability to obtain credit to be studied simultaneously in a constant manner.

Three series of related hypothetical loan proposals were presented to the trading banks to generate data to test the following behaviour:

(a) that a farmer's credit from a particular trading bank is independent of his capacity to repay a loan;
(b) that the credit-worthiness of a potential borrower is independent of his banking history;
(c) that lenders are unresponsive to the asset structure of the potential borrower in attempting to reduce the risk of loss of loan principal;
(d) that, under the Australian system of branch-banking (where managers from the same bank have a set of lending guidelines), there are no significant differences between branch managers in terms of their loan offerings for identical loan proposals;
(e) that there are no significant differences in the lending policy of a given trading bank between different rural industries; and
(f) that there are no significant differences between trading banks with respect to their lending behaviour.

Three factors that had emerged from the preliminary lender survey as being particularly important in affecting loan offerings were also included in the factorial experiment. These factors were:

(a) the managerial ability of the farmer, which included his capacity to repay a loan;
(b) his banking history and associated banking connections; and
(c) the security he could offer the lender.

Three levels of each of these factors (arbitrarily named 'good', 'average' and 'poor' for convenience in this paper) were included in the series of hypothetical loan proposals, thereby generating a total of 27 factor combinations (treatments). Each treatment was replicated four times, making a total of 108 loan proposals for each farm type included in the survey.

Each loan proposal contained details of property history, management, the farmer's banking history and associated banking connections, and the present status of the farm-firm, including any off-farm work.

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2 This survey was conducted between September 1975 and March 1976. Although five trading banks had participated in the preliminary lender surveys, only two banks were prepared to participate in the factorial experiment. The results of this latter work might have been much more useful if the other banks had participated.
undertaken by the farmer. A set of tables was included showing asset structure, farm receipts, farm payments, off-farm income and a yearly analysis of cash in-flow and cash out-flow for the three years immediately preceding the presentation of the proposal. The proposals also included a statement on the farmer's aims and his reasons for seeking funds to finance property expansion. Tables detailing projected receipts and payments for the first three years of the proposed plan were included with the proposal.

While it was realised that farm management is a difficult concept to define, for the purpose of the study it was assumed that several management attributes could be quantified in order to provide branch managers with workable indicators of managerial ability. Hence, the farmer's managerial ability depicted in each proposal was based on management factors such as yields of crop and livestock products, prices received for crop and livestock products, and the overall level of farm management. The better farmers in each industry type, for example, were assumed to have the capacity for realising above-average yields and prices for crop and livestock products. The converse was assumed for the farmer of poor managerial ability.

The farmer's banking history outlined in the loan proposals consisted of two parts. First, a statement was provided on the farmer's ability to meet past debt commitments, and on his ability to hold credit reserves with the bank. Second, variations were provided on the extent of deposits held by members of the farmer's family with the bank in question. This represented the farmer's associated banking connections. The security the farmer could offer the bank varied according to the current market value of land assumed for each loan proposal. This market value of land referred to the farm owned by the farmer, and not to the farm proposed for purchase. The market value for the farm assumed to represent good security was twice that assumed for the farm representing poor security to the lender.

It was recognised that the borrower's character is important to a lender. Since it is not easy to quantify this factor, all of the loan proposals stated clearly that the farmer was a man of good character. Hence, the personal knowledge that managers have of their clients remained indeterminate in its effect on a loan recommendation. An additional assumption adopted for the factorial experiment related to the availability of funds for lending. It was assumed for the study, and stated in the loan proposals, that each bank had the funds available for lending.

In order to test for inter-industry differences in the lending behaviour of the trading banks, the factorial experiment was designed to include the three agricultural industries used in the preliminary survey of lenders, namely dairy, sheep and wheat. The asset structure, income earning capacity and banking history for each loan proposal were given at the same level for each factor combination across the three different industry-based farm types. The factorial experiment therefore was designed to obtain a total of 324 loan appraisals from each bank. Since this was too great a number of loan proposals to present to the head office of each bank, the experiment was designed to use a sample of branch managers on the basis that each manager received six loan proposals. This required the sampling of 54 branches per bank.

The main problem associated with the factorial experiment was that of
obtaining loan offerings for the various factor combinations presented to branch managers. The purpose of the factorial experiment was to obtain loan offerings for various treatments so that the effects of certain factors on a farmer's credit could be established. The method used to derive loan offerings for the factorial experiment was changed from that adopted for the preliminary lender survey which, in turn, had followed Irwin's pro-
jective interview technique.

In the earlier work, loan limits were established by presenting a series of requests for different loan amounts to lenders. However, this approach would have required at least six separate loan proposals being analysed for each treatment. This would have meant taking around 2000 observations from each bank. Further, the projective interview technique was considered unsatisfactory for the factorial experiment since it would not have guaranteed an unbiased response of lender behaviour to each loan proposal. In addition, such an approach would not have ensured maximum loan amounts for each treatment. The attainment of the objectives of testing for inter-industry and inter-branch differences would not have been ensured under this alternative approach.

In order to establish lender response to different treatments, managers were asked to provide maximum loan amounts that they were prepared to recommend in a submission to head office. This approach represented a change to the normal lender-borrower situation where the farmer applies for a given loan amount. It was assumed for the purpose of the factorial experiment that the farmer was attempting to acquire an additional property at an auction. Thus, the farmer was unable to furnish details on the unit price of land being sought and, hence, on the loan amount required to purchase the property.

Before the factorial experiment was undertaken, the hypothetical loan proposals were presented to respective head offices of the participating banks for approval. The lending personnel who had previously evaluated the general loan proposals reviewed the factorial proposals. This was to ensure that the levels of factors depicted in the loan proposals were consistent with their interpretation by the lending personnel of the participant banks. Several minor changes were subsequently made to the proposals.

A pilot run was then made in a country town in New South Wales to test the reactions of branch managers to the loan proposals. As the subsequent survey was to be conducted by mailed questionnaire, this test was designed to approximate the mailed approach as closely as possible. The managers were able to evaluate the proposals and recommend maximum loan amounts. The proposals and loan amounts were then discussed with the managers to check for ambiguities or misunderstandings in the proposals, and to gain a better understanding of the loan evaluation process at the branch level. The only difficulty reported by the managers concerned the time required to evaluate each proposal. Following these discussions, a decision was made to ask each manager to evaluate six loan proposals only in the subsequent study. This formed one important constraint in the design of the factorial experiment.

The other major constraint was the number of branches located in reasonably homogeneous agricultural areas. It was necessary to sample from branches within these areas to test for inter-branch differences in loan offerings. Approximately 50 per cent of all country branches of the two banks in New South Wales were sampled.
Because of these two constraints, block size was confined to six factor combinations. Since there were four replications of each treatment, the loan proposals were distributed in two sets of nine blocks. In order to generate sufficient information on the main effects (that is, managerial ability \((X)\), banking history \((Y)\), and security \((Z)\)) and on the first-order interactions (that is, \(XY, XZ,\) and \(YZ\)), the following system of confounding was used: Set 1, \(XY, XZ^2, YZ, XY^2 Z\); Set 2, \(XY^2, XZ, YZ, XYZ^2\). This resulted in a partial loss of information on higher order interactions. While it would have been preferable to have included additional factors, additional levels of each factor, and more farm types, the experiment was constrained by the problems outlined above.

The series of six treatments was presented to the selected branch managers in the form of a mailed questionnaire. The cost and time associated with a personal interview approach meant that the questionnaires had to be carefully designed to be self-explanatory to achieve a satisfactory response under the mailed questionnaire approach. Such an approach involved the usual advantages and disadvantages of mailed surveys.

A letter was sent from the respective head offices of the banks involved to the branch managers before the questionnaires were distributed. The letter indicated the bank’s approval of, and interest in, the research but stressed that participation by individual managers was voluntary. Covering letters were also sent by the authors to managers with each set of questionnaires to assure them of anonymity and confidentiality in their replies. The internal mailing systems of the banks were used to distribute and return questionnaires. The overall response rate was 80 per cent, which is good for a mailed questionnaire.

The loan estimates generated in the experiment are subject to one qualification. Where a loan recommendation is above an individual branch manager’s discretionary lending limit, the recommendation is normally forwarded to head office for approval. In this study, this review step was bypassed as it would have involved considerable expenditure of time by the lending personnel at the head office of each bank. Thus the loan estimates are loan recommendations from the branch managers rather than actual loan offerings from the bank. All loan recommendations made by branch managers were included in the analysis.

**Discussion of Results**

*Single industry analyses*

The results obtained from the analyses of loan offerings for the dairy, sheep and wheat loan proposals for each bank are summarised in Table

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3 For further discussion on the design of this experiment see Ockwell (1979, vol. I, chs 5 and 7). The system of confounding for the experiment was based on Kempthorne (1966, pp. 357–58). For further reading on factorial experiments, see Yates (1937), Steel and Torrie (1966) or Snedecor and Cochrane (1968).

4 A simplified set of loan proposals used for the factorial experiment is contained in Ockwell (1979, vol. II, Appendix B).

5 The bank officials who normally review agricultural loans in this category considered that at least 90 per cent of loan recommendations submitted by branch managers are accepted at head office. Several managers stated that there was little point in forwarding a recommendation to head office that they believed was unacceptable.
1. The differences in recommended loan amounts among branches for the same industry were significant at the 1 per cent level in all cases. This indicated that, within each industry, loan offerings for identical loan proposals varied widely among branch managers. While managers have policy guidelines to assist their decision making, loan recommendations appear to depend largely upon each manager’s assessment of a given loan proposal. Such variability was not unexpected, given differences that exist in such characteristics as age, experience, and other personal traits among individuals.

<table>
<thead>
<tr>
<th>Source</th>
<th>Dairy</th>
<th>Sheep</th>
<th>Wheat</th>
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<tbody>
<tr>
<td></td>
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<td>Bank B</td>
<td>Bank A</td>
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<td>Branch</td>
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<td>Management</td>
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<td>Banking history</td>
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<td>**</td>
<td>NS</td>
</tr>
<tr>
<td>Security</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
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<tr>
<td>Management times history</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Management times security</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>History times security</td>
<td>NS</td>
<td>*</td>
<td>NS</td>
</tr>
</tbody>
</table>

* Levels of significance:
  - NS — not significant at the 5 per cent level;
  - * — significant at the 5 per cent level;
  - ** — significant at the 1 per cent level.

For bank A, the results suggested that a farmer’s credit is largely affected by his capacity to repay a loan (management). As shown in Table 1, banking history and security varied in their effect on the loans offered among industries. None of the factor-factor interactions was significant at the 5 per cent level for this bank.

The results for bank B were generally similar to those for bank A, but were perhaps more internally consistent. Management and banking history were highly significant, while security was not significant, in explaining the variation in size of loan offering for each industry.

While the results generally supported the null hypothesis that loan safety for the lender is not affected by the asset structure of the potential borrower, the apparent nonsignificance of security may be related to the

4 From bank A, the least-squares mean loan recommendations for the dairy, sheep and wheat loan proposals were $39,715, $40,150 and $46,572, respectively. The corresponding figures for the dairy, sheep and wheat proposals from bank B were $46,333, $44,754 and $35,315, respectively. For identical loan proposals from bank A, 56.5 per cent had a range in loan recommendations across branches of $25,000 or more and 24.6 per cent had a range of $35,000 or more. Similarly, from bank B, 48.1 per cent of identical loan proposals had a range in loan recommendations across branches of $25,000 or more and 23.5 per cent had a range of $35,000 or more.
management factor. That is, the limiting effects of management in terms of repayment capacity appear to have overshadowed the potential limiting effects of security on loan offerings.

The results pertaining to the security factor may also be related to the security requirements of the two banks. From the preliminary survey of lenders it was established that bank A was prepared to advance up to 48 per cent of the current market value of land, whereas the corresponding figure for bank B was 56 per cent. Loan recommendations for the wheat loan proposals were generally higher than those for either of the two livestock proposals for bank A. In contrast, the converse held for bank B.

From Table 1, the effect of security on loan offerings was significant at the 5 per cent level for the wheat loan proposals of bank A. That is, the higher wheat loan amounts relative to the high security requirements of bank A may account for the significant response for the security factor. The hypothesis of a relationship between repayment capacity and security is also supported by the significance of the management-security interaction for the dairy loan proposals from bank B, which was significant at the 1 per cent level for the dairy loan proposals. In this case, the loan recommendations for these proposals were higher than those for either the sheep or the wheat proposals.

The results of the single industry analyses were consistent with the results obtained from the preliminary survey of lenders. Management and banking history have a significant effect on a farmer's creditworthiness. It appears that security assumes the role of a back-stop in the event of default by the borrower. The above results also highlight the variability in loans offered by different branch managers of the same bank.

**Inter-industry comparisons**

Inter-industry comparisons for individual banks were carried out to test the null hypothesis that no significant differences exist in the application of lender policy between different rural industries. Table 2 contains the results derived from the analysis of variance for each of these inter-industry comparisons.

The difference in loan recommendations between the dairy and wheat proposals, and between the sheep and wheat proposals, were significant at the 1 per cent level for both banks. While bank A was prepared to lend significantly higher amounts for the wheat proposals than for either the dairy or sheep proposals, the converse held for bank B. These results suggested that bank A had a preference in lending to wheat propositions over livestock propositions. In contrast, bank B appeared to prefer the livestock proposals over the wheat proposals.

In the case of bank A, the interaction between area (industry) and security was significant at the 5 per cent level for both the dairy-wheat and sheep-wheat comparisons. This suggested that the relationship of loan recommendation to security varied between rural industries, as would be expected with the higher loan amounts for the wheat proposals.

For bank B, the interaction between industry and management, which was significant at the 1 per cent level for the dairy-sheep comparison, suggests that the relationship between the size of the loan and manage-
TABLE 2
Analysis of Variance for Inter-Industry Comparisons

<table>
<thead>
<tr>
<th>Source</th>
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<th>Dairy-sheep</th>
<th>Sheep-wheat</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Bank A</td>
<td>Bank B</td>
<td>Bank A</td>
</tr>
<tr>
<td>Between areas</td>
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<td>**</td>
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<tr>
<td>Management</td>
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<tr>
<td>Banking history</td>
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<td>**</td>
<td>NS</td>
</tr>
<tr>
<td>Security</td>
<td>**</td>
<td>NS</td>
<td>NS</td>
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<tr>
<td>Within dairy</td>
<td>**</td>
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</tr>
<tr>
<td>Within wheat</td>
<td>**</td>
<td>**</td>
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<tr>
<td>Within sheep</td>
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<tr>
<td>Area times management</td>
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<tr>
<td>Area times history</td>
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<td>Area times security</td>
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<td>Management times history</td>
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<tr>
<td>Management times security</td>
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<tr>
<td>History times security</td>
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<td>NS</td>
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</table>

a Levels of significance as for Table 1.

ment varied between the dairy and sheep proposals. This was an interesting result given that the farmer's capacity to repay was kept as similar as possible for identical factor combinations. Similarly, the response of loan recommendation to banking history varied between the sheep and wheat proposals. This interaction was significant at the 5 percent level.

It is clear from the results that these banks lend preferentially among agricultural industries and that they have different preferences. Thus, the results could not support the null hypothesis that there are no significant differences in the implementation of lender policy among rural industries.

Composite analysis by bank

A composite analysis including all observations for each bank was conducted to test the overall significance of sources of variation in loan recommendations. The results of the within-bank analyses are presented in Table 3.

For each bank, the differences in interpretation of lender policy at the branch level were highly significant in their effects on loan offerings, both among rural industries and among managers of the same rural industry. Security varied in its effect on loan recommendation between the two banks. The reason for such variation in the levels of response may be related to the respective security requirements of the two banks (as discussed in a previous section).

The composite analysis by bank indicated that these lenders considered several factors in appraising rural loan proposals. This was consistent with the general theme underlying the research that trading banks adopt
nonprice criteria in allocating agricultural credit. Presumably they do this to reduce the risk of principal loss.

Inter-bank comparisons

Three inter-bank comparisons were made on an industry basis to verify conclusions regarding differences in lender policy between the two banks derived from the foregoing within-bank analyses. The results of these inter-bank comparisons are shown in Table 4.

TABLE 3
Composite Analysis of Variance

<table>
<thead>
<tr>
<th>Source</th>
<th>Significance&lt;sup&gt;a&lt;/sup&gt;</th>
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<tbody>
<tr>
<td></td>
<td>Bank A</td>
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<tr>
<td>Between areas</td>
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<td>Management</td>
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<td>Banking history</td>
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<tr>
<td>Security</td>
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<td>Within dairy</td>
<td>**</td>
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<td>Within sheep</td>
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<td>History times security</td>
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<sup>a</sup> Levels of significance as for Table 1.

TABLE 4
Analysis of Variance for Inter-Bank Comparisons

<table>
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<th>Source</th>
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<tr>
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<td>Bank times management</td>
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<td>Management times security</td>
<td>NS</td>
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<tr>
<td>History times security</td>
<td>NS</td>
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</table>

<sup>a</sup> Levels of significance as for Table 1.
The results invalidated the null hypothesis that there are no significant differences between trading banks with respect to their lending behaviour. From Table 4, the differences in loan offerings between the two banks are significant at the 1 per cent level for the dairy-dairy and wheat-wheat comparisons and at the 5 per cent level for the sheep-sheep comparison. The significance of the interaction between bank and banking history for the three analyses suggests that banking history varied in its effect on loan offerings between the two banks. The results presented in Table 3 suggest that bank B attached relatively more importance to the factor of banking history in appraising rural loan proposals than did bank A.

Conclusions

The nonprice mechanism used by the trading banks to allocate credit among farmers was studied using a factorial design. Research at the University of Illinois and the lender surveys conducted in the initial stages of this project suggested that several factors influence the decisions made by lenders in advancing credit to farmers. Three of these factors were included to determine their effects on a farmer's borrowing capacity, namely the managerial ability of the farmer, the borrower's history as a customer of the bank, and the security the borrower could offer the bank.

Of these three factors, the farmer's managerial ability was highly significant in its effect on the amount he could borrow. Since the farmer's repayment capacity was effectively limited by his managerial ability, it seems that there is a connection between the managerial ability of the farmer, his capacity to repay, and loan offering. This research has gone some distance in confirming these relationships.

The effect of security on a farmer's ability to obtain credit requires further research. The results obtained for bank B suggested that security did not have a significant effect on loan recommendation within the range of loan amounts generated by the proposals. It appears, however, that the farmer's ability to meet his debt commitments limited loan recommendations to amounts that fell within the security requirement of bank B.

The results of the research were consistent with the banks' apparent rule of thumb that farmers are generally unable satisfactorily to service debts which markedly exceed 50 per cent of the current market value of their land. While there were exceptions, generally the amounts that the farmer could borrow from either of the two banks did not exceed this guideline. A favourable banking history and associated banking connections, or outstanding managerial ability on behalf of the borrower, may increase a farmer's credit to beyond the 50 per cent limit. As this held across farm types, a market mechanism relating land price to net farm income, and hence debt servicing ability, may be responsible for this observation. More research is needed to confirm or refute the existence of such a market mechanism. Related research might investigate the situation where a farmer is unable to offer land as security for a loan.

The relevance of banking history as a factor affecting a farmer's credit emerged from the general survey of lenders and has been shown, through the factorial experiment, to have an important effect on a farmer's borrowing capacity. Thus it would appear worthwhile for farmers to build
up a favourable connection with a bank in order to improve their creditworthiness.

The results obtained in this study suggest that problems exist in the allocation of credit among potential borrowers from trading banks. As an indication of such problems, the amount of credit offered to a farmer appears to depend largely on the branch manager to whom the loan proposal is presented for appraisal. While loan recommendations for identical proposals often varied between managers of the same bank by $30,000 or more, much of the inter-branch variation may be attributed to differences in personal characteristics. However, the existence of such problems does not necessarily justify the introduction of additional lending institutions for agriculture. It may be possible for the problems to be overcome within the existing institutional framework. For example, it may be appropriate for the trading banks to review their training programs on appraising rural loan proposals with a view to achieving a more consistent treatment of applications.

Similarly, the differences in loan recommendations for comparable wheat and livestock proposals were significant at the 1 per cent level for each of the two banks in the study. The results also suggested that there are significant differences in the lending behaviour of the two banks. From this, it would appear to be worthwhile for farmers to know how the various trading banks lend to different rural industries. Another extension to the research would be that of considering farm types in addition to those included under the present study.

Apart from the limitations of the study discussed earlier, one of the most disappointing aspects of the research was the general lack of support given by the trading banks. Apart from the co-operation given to the project by banks A and B, and their personnel, many problems were encountered in seeking the support of the other trading banks for the factorial experiment. While five trading banks participated in the lender surveys, three of these declined to participate in the research to its conclusion. Two other trading banks would not participate in any of the research. This makes research in agricultural finance difficult, because it prevents a general understanding of the lending behaviour of the trading banks servicing Australian agriculture.

References
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