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Country Bank Management of Yield, Risk and Liquidity on Agricultural Loans

Peter J. Barry and Gregory J. Greathouse*

Evaluating the capacity of financial markets and institutions to effectively meet the financing needs of commercial agriculture requires close, continuing attention. Structural changes in commercial agriculture and in financial markets can significantly affect the magnitude, composition and direction of future financing flows [11].

One important phase of studying financial markets deals with the financing problems of commercial banks. Our general approach is to evaluate the agricultural lending activities of commercial banks through the use of analytical decision models that reflect the optimizing behavior of individual banks [3]. However, the accurate specification of such decision models requires current information on numerous elements of the bank's decision making environment, including the practices used to modify the yield, risk and liquidity of agricultural loans. Accordingly this paper's purpose is to report and analyze empirical data identifying and measuring the actions taken by banks of alternative size, type and charter to modify loan yield, risk and liquidity. Besides providing input data for further research, the information should be useful in evaluating the managerial behavior and market responsiveness of commercial banks as well as providing agricultural borrowers with information needed for more effective financial planning.

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*Associate Professor and Research Assistant, respectively, Department of Agricultural Economics and Rural Sociology, Texas Agricultural Experiment Station, Texas A&M University, College Station, Texas.

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The Setting: Financing Needs of Commercial Agriculture and Implications for Country Banks

Agricultural financing in Texas, as elsewhere in the United States, has changes significantly over time. Rapid consolidation of land ownership, contintuing adoption of capital-intensive technology, greater off-farm purchases of operating inputs whose costs are rising, increases in land values, and lower rates of farm savings have all contributed to rapid increases in use of both real estate debt and non-real estate debt. On balance, the debt instruments which farmers sell are increasing rapidly in terms of total volume, size of loan per farm and economic repayment period for a broad range of farming, ranching, feeding and other agricultural operations.

In contrast to the needs of agricultural borrowers in rural areas, the bulk of savers reside in metropolitan areas where growing numbers of people are saving relatively small amounts per person, often subject to high liquidity preferences. As a result, financial intermediaries face special problems in achieving the joint flows of funds and securities in size and time dimensions satisfactory to savers and borrowers while also satisfying their own yield, risk and liquidity preferences.

For country banks, their agricultural finance problems have been generally identified to include the more rapid growth of financing by other lenders [2] (e.g. the Farm Credit System and even large city banks), impediments on flows of funds to rural areas [12], difficulties in matching growth in deposits with growth in demand for loans [8], limits on sizes and lengths of loans to individual customers [7], diseconomies of small size restricting the use of many loan services [4,5], and other, more profitable uses of bank funds.

Banking proponents have argued for strengthening the capacity of commercial banks to serve agriculture because the generally competitive nature of banking tends to assure greater responsiveness to changing market conditions and greater

capacity for innovative intermediation that serves their savers and borrowers [9]. Moreover, there is the philosophical argument that a strong and pervasive private system of finance is consistent with U.S. philosophy. Often these arguments occur as exhortations for country banks to be more liberal, progressive and profit-conscious in financing agriculture. The Report of the Agricultural Credit Task Force [10] appears to have largely taken this approach. While likely appropriate in many instances, these exhortations overlook the general decision making environment of commercial banks, including lenders' objectives, constraints, alternatives in managing assets and liabilities and "feedback" effects over time between loans and deposits.

Responses by country banks to changing agricultural loan demands appear mixed. National data indicate that many banks have competed vigorously for larger, more stable sources of funds in order to maintain rates of growth of loanable funds that are commensurate with rates of growth of agricultural loan demands [8]. Other country banks have appeared to largely forego emphasis on agricultural loans in favor of consumer and other business loans, sales of federal funds and/or investment in securities.

In Texas, commercial banks are organized in a unit banking system with no branching permitted. Hence, Texas banks tend to be small in size and large in numbers -- generally between 1200 and 1300 -- with more than half chartered as state banks. Nonetheless rapid structural adjustments have occurred through growth of bank holding companies primarily in metropolitan areas. Recent data indicate that about half of the state's total bank deposits are controlled by holding companies -- still less than the national average of about 60 percent.

Perhaps prompting such structural changes, Federal Reserve studies have indicated that large corporations in Texas do a substantial amount of their banking

business -- both demand deposits and loans -- outside the state [13]. Reasons include the inadequate credit capacity of many Texas banks and the aggressive competition of out-of-state banks. If many large corporations are not being adequately serviced by the Texas banking system, it is likley that smaller businesses in rural areas are having similar difficulities.

Design for Data Collection and Analysis

To facilitate data collection and analysis, a simple conceptual model was developed under the assumption that the supply of agricultural loans forthcoming from country banks depends upon loan yield (Y), risk (R) and liquidity(L). In turn loan yield, risk and liquidity are expressed as a function of bank size (S), specialization (S_p) and charter (C).

(1) $Y = f(S,S_p,C)$

(2) $R = f(S,S_p,C)$

(3) $L = f(S,S_p,C)$

Bank size is presumed to be associated with variations in economies of size, resource constraints and management capacity. Banks were considered agricultural if 25 percent or more of their loans were "agricultural loans". Agricultural specialization reflects bank choices in loan specialization and/or its market opportunities for loan diversification. Bank charter (state, national) can be associated with legal requirements on loan sizes, reserves, and other regulatory features.[1/]

Measurable criteria were then identified for yield, risk, and liquidity in order to implement data collection and to evaluate differences in loan terms among the respective classifications. The conceptual model is expanded in the following

equations to cast loan yield, risk and liquidity in terms of those practices one might expect banks to take in modifying these loan characteristics.

1.1 Yield function $Y = f(Y_1, Y_2, Y_3)$

where

Y_1 = the level and responsiveness of interest rates to differences in loan size, maturity, and borrower

Y_2 = the method of charging interest

Y_3 = the use of compensating balances

More yield-conscious banks are expected to exhibit more responsive interest rate policies and may utilize such loan pricing mechanisms as compensating balances and alternative methods of charging interest.

1.2 Risk function $R = f(R_1, R_2, R_3, R_4, R_5, R_6)$

where

R_1 = the legal loan limit

R_2 = specialization in agricultural loans

R_3 = down payment requirements or limits on loan/asset ratios

R_4 = financial statements and other loan documentation required of agricultural borrowers

R_5 = insurance requirements on loans

R_6 = use of unsecured loans

Banks with higher degrees of risk aversion will likely diversify their loan portfolios and require higher down payments as well as requiring more extensive loan documentation, insurance and security to reduce the risk of losses on agricultural loans.

1.3 Liquidity function $L = f(L_1, L_2, L_3)$

where

L_1 = loan maturity: maximum loan lengths for alternative loan purposes

L_2 = portfolio time distribution: allocation of banks' agricultural loans among operating, intermediate and long term loans

L_3 = the bank's loan deposit ratios

Banks with relatively high liquidity preferences are expected to prefer shorter loan maturities and will likely concentrate their loan portfolio more heavily in shorter term loans. Moreover, lower loan/deposit ratios are typically associated with higher liquidity.

In addition, information on such items as computer facilities, specialized loan personnel, credit lines, and costs of funds was gathered to indicate other loan services offered by country banks.

Data was collected in late 1973 in a survey mailed to 560 commercial banks located in Texas communities with populations of less than 50,000 people. Bankers were asked to provide data on banking, loan volume and on those yield, risk and liquidity features identified above. Hence the data collected do not necessarily document terms on actual loans made; rather they reflect the bankers' estimates of their responses to selected loan situations. The survey was formulated to assure as completely as possible that responses represent actions taken on actual loans under fairly normal conditions in financial markets.[2/]

Loan Yields

Gross yields on agricultural loans are determined primarily by the level of interest rates charged and by actions taken to improve interest returns.[3/] Table 1 indicates averages of the best interest rates offered on agricultural loans and

the average range of rates above the best rate for banks classified by size and type. The average rate on agricultural loans for all banks was 8.25 percent with an average range of 1.30 percent. The best rate appears to increase somewhat as size of bank increases and appears to be slightly larger in non-agricultural banks.

During the study the national prime rate was increasing periodically although rates on loans to small businesses were expected to be lower and adjusted more infrequently to changes in money market conditions. A usury limit in Texas of 10 percent interest on loans to individuals constrains the maximum rates charged on most agricultural loans.

About 30 percent of responding banks indicated that interest rates on agricultural loans are responsive to length and size of loans (Table 2). In addition larger banks, especially non-agricultural banks above $10-15 million deposits, appear to exhibit greater interest-responsiveness to length of loan. The association of bank size with loan size exhibits no clear pattern indicating that small banks appear to be as interest responsive to loan size as large banks.

Larger, non-agricultural banks appear to more fully utilize alternative methods of charging interest on agricultural loans -- especially the add-on method -- to increase the actuarial rate being paid by the borrower (Table 3).

Compensating balances refer to specified percentages of loans held on deposit by the borrower at the lending bank. These balances help banks to increase their deposits, lending capacity, and yield on loans by raising the actuarial rate paid by the borrower. While previous studies [e.g. 6] have indicated relatively little use of compensating balances by banks on agricultural loans, responses to this study indicate growing use of this practice (Table 4). About 18 percent of responding banks indicate use of compensating balances on agricultural loans while about 22 percent use the practice on non-agricultural loans. The use of compensating balances tends to increase with size of bank, particularly banks above $20 million

in deposits. Moreover, the proportion of non-agricultural banks utilizing compensating balances appears to be about double that of agricultural banks.

Loan Risk

In this study loan risk refers to the potential failure of borrowers to repay their loans. Such failures constitute monetary losses to the bank as well as loss of confidence of banks' customers. Legal limits on loans to any one borrower provide one regulatory means of abating default risk. Other alternatives as outlined in equation 1.2 include loan diversification and other actions lenders use to assure the adequacy of their borrowers collateral and repayment capacity.

Legal loan limits (Table 5) ranged from $10,000 to $811,000, averaging $125,000 per bank. Legal loan limits in state banks exceeded those of comparable national banks due to less restricting state regulations. However, the smaller average size of state banks caused the overall average loan limits for state and national banks to be similar. Loan limits in non-agricultural banks tended to exceed those of agricultural banks primarily due to larger bank size.

About 80 percent of the responding banks appear to have legal loan limits below $200,000. While loan limits will increase over time with increases in bank captial stock, many of the smaller banks may have continuing difficulty in fully serving the financing needs of their larger agricultural customers. Survey responses indicated that loan requests exceeding legal loan limits occurred in 73 percent of the agricultural banks and 43 percent of the non-agricultural banks. Generally not more than 10 percent of a bank's loans exceeded its legal limit; however, such requests were the bank's largest in value terms.

Agricultural banks do indeed appear to be heavily dependent on and/or committed to agriculture in their business activities. Agricultural banks comprised 61 percent of responding banks and accounted for 81.5 percent of agricultural loan volume. Moreover agricultural loans comprised an average of 48.3 percent of total loans

for agricultural banks and 13 percent of total loans for non-agricultural banks (Table 6). This specialization in agricultural loans may suggest a riskier asset allocation on the part of agricultural banks; however, more definitive information is needed for such a conclusion. Non-agricultural loan activities, for example, may be even more specialized than agricultural loans. Moreover, loan specialization that leads to improved loan analysis may tend to reduce loan risk.

Lenders typically require down payments on capital loans or utilize maximum ratios of loan to asset values to assure that outstanding loan balances are secured by the borrower's collateral and to assure some equity investment by the borrower. Nearly all banks indicated maximum percentages of loan to asset value of about 75 percent for equipment, breeding livestock and feeder cattle loans (Table 7). No perceptible differences in loan-asset value variations were evident among different bank sizes and types.

Lenders generally use balance sheets, income statements and cash flow budgets to evaluate a prospective borrower's liquidity, solvency, and profitability. Essentially all responding banks indicated that they require borrowers to provide balance sheets. Income statements and cash flow budgets were required by 62 percent and 28.6 percent of all banks, respectively (Table 8). In general demand for loan documentation increased with size of bank indicating a greater need for and/or capacity to utilize financial statements in larger banks. In addition a higher proportion of non-agricultural banks required loan documentation than did agricultural banks.

Insurance requirements on loans counter risk by providing a source of liquid funds to be used for loan repayments in case the insured events occur (death, fire, hail, flood, etc). More than half the responding banks indicated that they never require insurance on agricultural loans while the remainder required insurance at least in some cases (Table 9). In general a higher proportion of larger, non-agricultural banks tended to require insurance. This tendency likely indicates

that these banks are more aware of the effective role of insurance in agricultural financing and have sufficient volume of business to utilize programs offered by insurance companies.

Loan Liquidity

Commercial banks are highly sensitive to the liquidity characteristics of their assets and liabilities. Reserve requirements and the periodic examinations for adequacy of bank capital conducted by state and national authorities occur primarily to assure adequate liquidity. When cash is needed for deposit withdrawals and/or borrower's credit needs, a bank must either have sufficient cash on hand or be able to quickly obtain needed cash from repayments on maturing assets, by sale of assets, or by borrowing. Both the magnitude of loans relative to deposits and the maturity structure of loans can materially affect bank liquidity.

The loan-to-deposit ratio is often used to indicate the degree to which banks are using their available resources to accomodate the financing needs of their customers. Presumably, the higher the loan/deposit ratio, the lower is a bank's ability to make additional loans. Loan-deposit ratios of responding banks ranged from 19 percent to over 100 percent, averaging 52.6 percent (Table 10). Loan-deposit ratios for state banks and non-agricultural banks were somewhat higher than those of national and agricultural banks respectively. Moreover, higher loan-deposit ratios appear to be associated with larger banks -- an association that is consistent with aggregative data on loan-deposit ratios for much larger banks [1].

A notable exception to the positive association between loan-deposit ratio and bank size occurs in the $0 to $5 million deposit size class. Average loan-deposit ratios in this size class exceed those ratios of some larger classes. While the survey responses provide no definitive explanations for these high ratios, one can speculate that the ratios are indicative of either aggressive lending by some small banks seeking growth in profits and bank size, or they represent a growth in

loan demand that is exceeding the growth in bank deposits.

Table 11 indicates averages of bankers estimates of distributions of agricultural loan portfolios among operating, intermediate and long term loans. Presumably, higher porportions of longer maturing loans indicate lower liquidity especially when secondary markets for sales of agricultural loan paper are not well developed. Responses indicate that the relative importance of intermediate and long term loans tends to rise with size of bank and tends to be larger in non-agricultural banks as well. Apparently, larger, less specialized banks have greater capacity for carrying increasingly illiquid assets. This capacity is likely due to several factors: reduced loan risk associated with greater asset diversification; greater use of time and savings deposits; increasing borrowing capacity for larger banks; easier access to the money market for trading federal funds and other highly liquid instruments; and greater opportunity for specialization of loan and investment activities for more orderly financial planning and control.

To further indicate loan maturity, Table 12 reports average bank estimates of maximum loan lengths for financing purchases of machinery, breeding livestock and real estate. Loan lengths for machinery appear to consistently exceed loan lengths for breeding livestock. Moreover, larger banks appear to offer longer loans for all three loan purposes -- especially real estate.

Other Bank Services

Additional survey responses (Table 13) clearly indicate that a higher proportion of larger banks utilize computer facilities, employ specialized agricultural personnel, permit non revolving lines of credit, coordinate financing arrangements with other "lenders" (machinery dealers in this case), and pay higher interest rates to attract savings and time deposits. While the items reported are rather specific in nature, they cover several types of bank services and provide information on bank size groupings that can likely be generalized to other items as well.

Concluding Comments

The data generated in this study indicate some of the kinds of actions taken by country banks to modify the yield, risk and liquidity of agricultural loans. While not confirmed by statistical analysis, several notable variations in lending activities appear to be associated with bank size and, to a lesser extent, with bank type.

In general, small banks heavily dependent on agricultural loans appeared to charge slightly lower interest rates on agricultural loans and appeared less responsive in adjusting rates among borrowers and to variations in loan length. Moreover, a lower proportion of small banks used other loan pricing mechanisms to improve the yield of agricultural loans. Smaller banks are legally limited to smaller loans to individual customers, require less loan documentation, and appear less capable of providing intermediate and long term loans. Larger, non-agricultural banks appear more likely to treat their agricultural customers like other borrowers, expecting extensive loan documentation and utilizing compensating balances, lines of credit, insurance and term loans. While average maximum lengths of loans on machinery and breeding livestock still appear less than their economic payoff period, the availability of term loans does help to relieve some of the borrowers payback pressure.

These data provide further evidence of some of the agricultural financing problems mentioned earlier that are facing relatively small rural banks. Moreover the differences in lending capability among small banks appear to differ considerably. Hence the policy issues posed by the Agricultural Credit Task Force and others -- improved correspondent banking, easier participation loans, easier borrowing from the Fed, improved liquidity of agricultural paper, reduced restrictions on bank structure -- are important in terms of their impact on total flows of funds to agriculture and in terms of their impact on the performance of individual country banks. Whether larger, more stable sources of funds created by new policies have any affect on small, conservative banks is a matter for further study.

Finally, the responses of various sizes and types of banks to practices used in modifying loan yield, risk and liquidity will enable more detailed specifications of agricultural loan activities and constraints in bank decision models. Consequently, agricultural loans can be compared more thoroughly with other asset choices in terms of their contribution to bank objectives.

Footnotes

1. In the Tables to follow, bank size and type are primarily used to classify and report bank responses. Charter is used in only a few cases.

2. Over fifty percent of the surveys were completed and returned. Of the 292 responding banks, 177 were classified as agricultural banks, 102 were non-agricultural, and 13 were not so classified due to lack of information. Classification by charter indicated 161 national and 131 state banks. Deposit size of responding banks ranged from $700 thousand to $67 million with total deposits of $3.38 billion. Average bank deposit size was $11.6 million with average deposits in national banks ($14.3 million) exceeding those of state banks ($9.4 million) and average deposits of non-agricultural banks ($13.9 million) exceeding those of agricultural banks ($10.0 million). Hence it is obvious that banks with state charters and agricultural classification tend to be smaller than their respective counterparts.

   The distribution of total survey responses by deposit size is as follows:

Bank size: Total Deposits	Total Responses	Charter		Type	
		State	National	Agricultural	Non-Agricultural
$ 0 - 5 million	85	63	22	61	23
5 - 10 million	69	40	29	43	23
10 - 15 million	58	24	34	33	22
15 - 20 million	33	16	17	20	11
Above 20 million	47	18	29	20	23

3. Net yields on loans equal gross yields less the cost of "producing" loans. Such costs include costs of money and all non-money costs attributed to loan activities. Such cost data was not included in this study. Some loan cost data is available for banks keeping detailed records or subscribing to the Functional Cost

Analysis Program sponsored by the Federal Reserve System. However, even this cost accounting system fails to record data specific to agricultural loan activities. Rather, agricultural loans are treated together with other commercial loans.

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Table 1. Average of best interest rates and range of interest rates offered on agricultural loans classified by size and type of bank

Bank size: Total Deposits	Agricultural Banks		Non-Agricultural Banks		All Banks	
	Best Rate	Range	Best Rate	Range	Best Rate	Range
$			PERCENT			
0 - 5 million	8.14	1.42	8.23	1.25	8.16	1.38
5 - 10 million	8.20	1.29	8.16	1.19	8.18	1.25
10 - 15 million	8.23	1.33	8.25	1.45	8.23	1.36
15 - 20 million	8.32	1.15	8.75	1.18	8.49	1.16
Above 20 million	8.27	1.62	8.45	1.37	8.38	1.47
All banks	8.21	1.36	8.35	1.29	8.25	1.30

Table 2. Percent of banks indicating that length and size of agricultural loans may influence interest rates, classified by size and type of responding bank

Bank size: Total Deposits	Agricultural Banks		Non-Agricultural Banks		All Banks	
	Loan Length	Loan Size	Loan Length	Loan Size	Loan Length	Loan Size
$			PERCENT			
0 - 5 million	18.6	36.7	31.8	27.3	22.0	33.7
5 - 10 million	23.3	23.2	21.7	21.7	23.2	23.2
10 - 15 million	48.5	39.4	38.1	47.6	43.9	40.3
15 - 20 million	35.0	30.0	27.3	18.2	30.3	24.2
Above 20 million	31.6	25.0	39.1	21.7	35.6	23.4
All banks	28.7	31.8	32.0	28.0	29.7	29.8

Table 3. Methods of charging interest: percent of responding banks using remaining balance, add-on, and/or discount interest on agricultural loans, classified by size and type of bank

Bank size: Total Deposits	Bank Type: Agricultural			Non-Agricultural			All Banks		
	Remaining Balance	Add-on	Discount	Remaining Balance	Add-on	Discount	Remaining Balance	Add-on	Discount
$	PERCENT								
0 - 5 million	96.7	8.3	1.7	100.0	9.5	9.5	97.6	8.5	3.7
5 - 10 million	97.7	9.3	4.7	95.5	0.0	4.5	95.6	7.4	4.4
10 - 15 million	97.0	3.0	6.1	95.5	18.2	4.5	96.5	8.8	5.3
15 - 20 million	100.0	5.3	0.0	90.9	27.3	0.0	96.9	15.6	3.1
Above 20 million	100.0	10.0	5.0	100.0	17.4	4.3	100.0	14.9	6.4
All banks	97.7	7.4	3.4	97.0	13.1	5.0	97.2	10.1	4.5

Table 4. Percent of banks using compensating balance requirements on agricultural and non-agricultural loans, classified by size and type of responding bank

Bank size: Total Deposits	Agricultural Banks		Non-Agricultural Banks		All Banks	
	Agricultural Loans	Non-Agricultural Loans	Agricultural Loans	Non-Agricultural Loans	Agricultural Loans	Non-Agricultural Loans
$			PERCENT			
0 - 5 million	11.5	13.1	22.7	27.3	14.3	16.7
5 - 10 million	11.6	14.0	21.7	26.1	14.5	17.4
10 - 15 million	12.1	15.2	27.3	38.1	19.3	26.8
15 - 20 million	20.0	15.0	18.2	18.2	19.3	15.2
Above 20 million	20.0	31.6	39.1	47.8	27.7	39.1
All banks	13.6	15.9	26.7	33.0	17.9	22.2

Table 5. Distribution of legal loan limits classified by size, charter, and type of responding bank, reported in thousands of dollars

Bank size: Total Deposits	Bank Charter		Bank Type		All Banks
	State	National	Agricultural	Non-Agricultural	
$			$1,000		
0 - 5 million	49.8	38.6	43.9	55.0	47.0
5 - 10 million	91.3	69.6	80.3	87.7	82.2
10 - 15 million	161.9	101.9	120.4	134.3	126.6
15 - 20 million	202.9	150.4	184.2	163.0	176.6
Above 20 million	352.6	262.6	235.4	356.3	295.8
All banks	125.6	125.9	104.3	159.1	125.8

Table 6. Percentages of agricultural loans to total loans classified by size, charter, and type of responding banks

Bank size: Total Deposits	Bank Charter		Bank Type		All Banks
	State	National	Agricultural	Non-Agricultural	
$			PERCENT		
0 - 5 million	38.4	40.2	48.6	13.1	38.9
5 - 10 million	35.4	37.4	48.6	13.0	36.2
10 - 15 million	23.4	40.4	47.3	12.2	33.3
15 - 20 million	37.7	33.8	48.1	13.0	35.7
Above 20 million	32.6	27.4	47.3	13.9	29.4
All banks	34.3	36.0	48.3	13.0	35.2

Table 7. Maximum percentages of loan to asset value for equipment, breeding livestock, and feeder cattle loans, classified by size and type of bank

Bank size: Total Deposits	Equipment			Breeding Livestock			Feeder Cattle		
	Agricultural banks	Non-Agr. banks	All banks	Agricultural banks	Non-Agr. banks	All banks	Agricultural banks	Non-Agr. banks	All banks
$					PERCENT				
0 - 5 million	76.6	75.9	76.3	73.7	72.6	73.4	74.6	73.3	74.3
5 - 10 million	75.0	73.7	74.3	75.9	73.0	74.8	76.6	74.4	75.7
10 - 15 million	78.7	75.9	75.8	81.0	69.7	76.3	78.8	71.6	75.5
15 - 20 million	77.4	79.1	77.7	75.9	74.5	75.7	75.2	70.8	74.3
Above 20 million	76.4	79.5	77.6	74.5	76.2	75.7	75.7	76.2	76.2
All banks	76.6	75.9	76.1	75.8	73.2	74.8	75.9	73.6	75.2

Table 8. Percent of responding banks requiring borrowers to provide income statements and cash flow budgets, classified by size and type of bank

Bank size: Total Deposits	Agricultural Banks		Non-Agricultural Banks		All Banks	
	Income Statement	Cash Budget	Income Statement	Cash Budget	Income Statement	Cash Budget
$			PERCENT			
0 - 5 million	45.9	13.1	52.2	26.1	47.1	16.5
5 - 10 million	59.5	23.8	59.1	22.7	58.8	23.5
10 - 15 million	68.7	40.6	71.4	23.8	70.9	32.7
15 - 20 million	55.0	40.0	90.0	50.0	65.6	40.6
Above 20 million	75.0	50.0	87.0	43.5	80.9	44.7
All banks	57.7	28.0	69.7	31.3	62.0	28.6

Table 9. Percent of banks requiring some type of insurance on agricultural loans, classified by size and type of responding bank

Bank size: Total Deposits	Agricultural Banks			Non-Agricultural Banks			All Banks		
	Not Required	Required	Required at Times	Not Required	Required	Required at Times	Not Required	Required	Required at Times
$					PERCENT				
0 - 5 million	67.2	14.8	18.0	65.2	26.1	8.7	65.9	18.8	15.3
5 - 10 million	60.5	13.0	25.6	34.8	39.1	26.1	52.2	23.2	24.6
10 - 15 million	54.5	30.3	15.2	63.6	27.3	9.1	57.9	29.8	12.3
15 - 20 million	65.0	10.0	25.0	45.4	36.4	18.2	57.6	21.2	21.2
Above 20 million	55.0	30.0	15.0	39.1	34.8	26.1	46.8	31.9	21.3
All banks	61.6	18.6	19.8	50.0	32.4	17.6	57.0	24.4	18.6

Table 10. Average loan-deposit ratios classified by size, charter and type of responding banks

Bank size: Total Deposits	Bank Charter		Bank Type		All Banks
	State	National	Agricultural	Non-Agricultural	
$			RATIO		
0 - 5 million	.549	.489	.514	.594	.533
5 - 10 million	.530	.440	.483	.508	.453
10 - 15 million	.583	.478	.501	.541	.521
15 - 20 million	.610	.532	.546	.597	.569
Above 20 million	.661	.553	.624	.593	.594
All banks	.568	.495	.515	.552	.526

Table 11. Average percentages of agricultural loans distributed among operating, intermediate term and long term loans classified by size, and type of responding bank

Bank size: Total Deposits	Agricultural Banks			Non-Agricultural Banks			All Banks		
	Operating	Intermediate	Long	Operating	Intermediate	Long	Operating	Intermediate	Long
$					PERCENT				
0 - 5 million	77.8	16.1	6.1	80.5	17.9	1.6	78.5	16.6	5.9
5 - 10 million	78.4	15.6	6.0	72.1	20.6	7.3	76.0	17.5	6.5
10 - 15 million	74.5	16.4	9.1	66.3	25.0	8.7	71.3	19.8	8.9
15 - 20 million	77.3	14.5	8.2	58.2	35.9	5.9	70.7	21.9	7.4
Above 20 million	67.0	25.8	7.2	55.8	24.9	19.3	60.9	25.3	13.8
All banks	76.1	16.8	7.1	67.9	23.4	8.7	72.8	19.4	7.8

Table 12. Average maximum lengths of loans for machinery, breeding livestock and real estate, classified by size and type of responding bank

Bank size: Total Deposits	Agricultural Banks			Non-Agricultural Banks			All Banks		
	Machinery	Breeding Livestock	Real Estate	Machinery	Breeding Livestock	Real Estate	Machinery	Breeding Livestock	Real Estate
$					YEARS				
0 - 5 million	2.8	2.2	8.4	3.0	1.8	8.4	2.9	2.1	8.5
5 - 10 million	2.9	1.9	9.1	2.9	2.0	10.2	2.9	1.9	9.6
10 - 15 million	3.2	2.3	11.9	3.4	1.7	11.6	3.3	2.0	11.7
15 - 20 million	3.2	2.3	10.6	3.2	2.6	12.1	3.2	2.4	11.0
Above 20 million	3.3	2.6	11.2	3.3	2.2	12.0	3.3	2.4	11.6
All banks	3.0	2.2	9.8	3.1	2.0	10.8	3.0	2.1	10.3

Table 13. Percent of banks using selected loan practices, classified by size of responding bank

Percent of banks with	Size of Bank, $ Million					
	0 - 5	5 - 10	10 - 15	15 - 20	Above 20	All Banks
	PERCENT					
A. Some computer facilities available	12.2	19.7	48.2	65.8	60.5	35.8
B. Trained agricultural loan personnel	46.4	51.5	54.4	54.5	61.7	52.6
C. Agricultural financing arrangements with machinery dealers	1.2	7.2	27.6	33.3	36.2	17.2
D. Non-revolving lines of credit permitted	52.4	58.8	68.4	70.4	77.8	63.0
E. Interest rate on pass book savings (average rate)	4.93	4.95	4.97	5.01	5.07	4.98
F. a) No unsecured loans	37.4	38.2	36.8	34.4	38.3	37.3
b) Short-term unsecured loans permitted	60.2	60.3	61.4	62.5	59.6	60.6
c) Intermediate term unsecured loans permitted	24.1	23.5	17.5	43.7	19.1	24.0