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This paper is a progress report on an analysis of the costs and benefits of two government credit programs -- The Ohio Linked Deposit Program and the federal FmHA Guaranteed Loan Program. A survey of 199 commercial bank and Farm Credit System agricultural loan officers in Ohio was conducted in April, 1992 to evaluate their loan analysis procedures and to elicit their opinions of the two programs.

Anecdotal evidence indicates that the Ohio Linked Deposit Program and the FmHA Guaranteed Loan Program are viewed quite differently by agricultural lenders. All Farm Credit System offices and most agricultural banks in Ohio have enthusiastically participated in the linked deposit program since its inception in 1985. The FmHA program has been widely criticized. The major problems, as described by Klinefelter, include slow turnaround time on applications, excessive paperwork, concerns about whether the guarantee will be honored, borrower eligibility requirements and the complicated procedures needed for an experienced FmHA direct borrower to graduate to the guaranteed program.

Description of the Programs

Linked Deposit Program

The Ohio Linked Deposit Program was created in 1985 in response to what was perceived to be "... an inadequate supply of agricultural credit and loan financing at affordable interest rates consistent with the needs of many agricultural borrowers, ... making it difficult for many persons in agriculture to continue operations at present levels." The intent of the program was "... to provide a statewide availability of lower cost funds that will...contribute to the economic revitalization of this state" (House Bill 344, The 116th General Assembly). The original legislation authorized the use of up to \$100 million per year for a period of four years. In 1987, legislation was passed to make the program permanent, and in 1989, an additional \$10 million was made available because of severe drought conditions the previous year.

The program offers an interest rate reduction of up to four percentage points on operating loans of up to \$100,000 per borrower. Farmers apply for the program through their local bank or Farm Credit System office. The short application form requests the borrower's debt to equity ratio, interest as a percent of total operating costs and other factors that demonstrate

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the need for reduced rate financing. Lenders forward the applications to the State Treasurer's Office by a specified deadline (March 15 in 1992). Applications are reviewed by the Treasurer's staff, and applications are approved or denied based on the applicant's need and county of residence. The legislation mandates that funds are to be distributed in all 88 counties, to the extent possible.

To date, a total of \$810 million in reduced rate operating loans have been made under this program. Typically, about 1,500 applications are approved out of a total of 2,600 submitted, and the average loan size is about \$66,000. About two-thirds of the applications approved are at the \$100,000 maximum. The rest are about equally divided between the \$50,000 to \$100,000 and under \$50,000 ranges. Since 1986, about 80 percent of the approved applicants had participated previously. Over the last four years, the average approved applicant farmed 700 acres, had a debt:equity ratio of 1.9:1, and had interest expenses equal to 22.8 percent of total operating expenses.

FmHA Guaranteed Loan Program

The Farmers Home Administration serves as a "lender of last resort" to provide loans to farmers who cannot qualify for loans from commercial lenders at reasonable rates and terms. Historically, the FmHA funded its lending with government appropriated funds. These direct loan programs are being phased out and replaced by the guaranteed loan program which was first authorized in the Food Security Act of 1985 and further developed in the Food, Agriculture, Conservation and Trade Act and the Omnibus Budget Reconciliation Act of 1990. Under this program, FmHA agrees to repay up to 90 percent of any losses on loans made by qualifying commercial or cooperative lenders to eligible farm borrowers.

Applications for FmHA guaranteed loans are submitted by lenders to the local FmHA county offices. Applications are screened by county office staff to evaluate eligibility and creditworthiness. Loan terms are negotiated between the borrower and lender within FmHA guidelines. Loans are made and serviced by the commercial lender. If the borrower defaults, the lender normally handles the liquidation process, including any legal foreclosure proceedings. When the liquidation is completed, FmHA reimburses the lender for up to 90 percent of losses of principal, interest and allowable liquidation expenses.

As of year-end 1990, FmHA had \$337 million in Farmer Program loans outstanding to nearly 2,300 borrowers in Ohio. This amount represents 11 percent of total farm debt outstanding. Trends in Ohio are similar to the U.S. FmHA has been actively restructuring or writing off delinquent loans. Total lending activity has declined, and emphasis is shifting from direct to guaranteed loans.

Results of Loan Officer Survey

The sample of loan officers consisted of 60 Farm Credit System and 139 commercial bank personnel. The commercial banks included the 75 "agricultural" banks selected for an earlier study of credit scoring (see LaDue, et al). These banks either had at least \$5 million of agricultural loans or had 50 percent of their portfolios in agricultural loans. Another 64 banks or branches were selected from a mailing list from the State Treasurer's Office. The FCS list included virtually all Ohio offices of Mid-America ACA, which serves most of the Fourth Farm Credit District, and Ag Credit ACA, which serves an 18-county area in northern Ohio. The bank and FCS loan officers received essentially the same questionnaires.

We attempted to elicit the experiences and opinions of individual loan officers. Senior personnel were informed of the survey in advance and we asked them to avoid a coordinated response from an FCS association, holding company or a large bank with multiple branch offices. Answers to questions dealing with the handling of delinquent accounts revealed that one of the FCS associations centralizes the management of problem loans in regional "Special Accounts" offices. Hence, two Special Accounts loan officers were interviewed separately.

A total of 43 FCS (excluding Special Accounts personnel) and 62 commercial bank loan officers responded, for an overall response rate of 53 percent. Results are reported separately for FCS and commercial banks, although differences in their responses were minor. The respondents represented offices with a total of more than 16,000 non-real estate farm loans and nearly 11,400 farm real estate loans outstanding as of year-end 1991.

Time Required to Service Agricultural Loans

The FCS (commercial bank) loan officers reported spending an average of 6.98 (7.62) hours per year on a typical non-real estate farm loan (Table 1). These are very similar to responses reported by Ellinger and Barry in their study of Illinois banks. A new non-real estate loan account required an additional 3.16 (3.45) hours. Farm real estate loans required 7.40 (6.53) hours when first made and 1.65 (2.41) hours per year thereafter to service. Delinquent loan accounts required an additional 6.4 (6.96) hours per year. The commercial bank respondents reported spending an additional 6.96 hours to restructure a loan. To date we have too little information on the FCS Special Accounts offices to report on their experience. The standard deviations in Table 1 reflect considerable variation between loan officers.

The respondents were asked to report on their use of third party specialists to perform loan servicing duties. The combined FCS and commercial bank responses summarized in Table 2 suggest very limited use of outside services. Outside specialists are more commonly used for real estate appraisals (44 responses) and credit checks (24). In most cases, all or part of the

cost of these services is paid by the borrower. Table 2B summarizes the third-party costs involved in foreclosures.

The information in Table 3 tends to confirm some of the findings in our previous study of credit scoring models. Nearly all respondents require a balance sheet, an income statement and a cash flow projection. Solvency, liquidity, collateral and management ability are also commonly used measures of credit risk. There were noticeable, but not surprising, differences between FCS and commercial bank responses to their consideration of compensating balances and the use of a computed formula to quantify risk. All Fourth District FCS offices have been using a "risk indexing" formula to price their loans since the early 1980's. Interest rates associated with the risk classes determined with this formula are reported in Table 4. Note that commercial bank interest rates were only slightly higher for the various risk classes. This difference would be more than offset by FCS stock purchase requirements.

Time Requirements of Government Programs

The data in Table 5 represent considerable experience with the Ohio Linked Deposit and the FmHA Guaranteed Loan Programs. All of the FCS respondents and 95 percent of the commercial bank respondents had participated in the linked deposit program. Our survey respondents accounted for 822 applications that were accepted in 1992, or more than half of all applications accepted in a typical year. Two thirds of the respondents reported some experience with the guaranteed loan program.

The loan officers reported spending an average of 2.2 hours of additional time to comply with the requirements of the linked deposit program. The additional time spent on an average FmHA guaranteed loan was 16.1 hours for FCS respondents and 12.3 hours for commercial bankers. The large standard deviations reflect considerable variation between individual respondents.

Loan Officer Opinions of the Programs

Questions were asked to measure the respondents' opinions of the programs and to solicit their suggestions for changes. The responses are summarized on Likert type scales (1=Strongly Agree through 5=Strongly Disagree) in Tables 6 and 7. Standard deviations provide some indication of the degree of unanimity among the respondents.

The linked deposit program is generally viewed as one that offers borrowers a significant reduction in interest rates with relatively little effort on the part of the lender. Note, however, that acceptance into the linked deposit program has little bearing on the decision to approve or deny loan applications. Under the program, all credit risk remains with the lender. The program's role in supplying additional loanable funds is also viewed as minor, especially by FCS respondents.

The respondents were generally neutral regarding possible changes in the linked deposit program (see Table 6b). There appears to be general satisfaction with the \$100,000 cap, the date for distributing funds, authorized purposes of the loan funds and the amount of paper work involved. At the time the survey was conducted, there was considerable publicity on the state's worsening budget situation. Nevertheless, the lenders were clearly opposed to discontinuing the program. A similar program in Indiana had been discontinued several months earlier due to state budget constraints.

There is general agreement that the 90 percent FmHA guarantee does effectively reduce the credit risk on loans; however, the respondents were highly critical of virtually every other aspect of this program. There was modest agreement that the program may help borrowers who fell into hard times to continue farming. It appears, however, that lenders are using FmHA guarantees mainly for existing customers rather than to bring in new, high risk clients. On average, the respondents turned down 18 loans in calendar year 1991 due to too much debt or inability to cash flow the loan.

Concluding Observations

The Ohio Linked Deposit and FmHA guaranteed loan programs cannot be compared directly due to differences in eligibility criteria and procedures. However, both programs offer benefits to borrowers and lenders, and both require lender involvement.

Borrower benefits from the linked deposit program are obvious -- a 4 percent reduction in interest rates on operating loans up to \$100,000 per borrower. Benefits for lenders include a slight decrease in credit risk due to reduced borrower outlays for interest, and goodwill. The availability of linked deposit loans is widely publicized by lenders. Participation costs for lenders are modest -- a little over two hours per year for each applicant to the program. Transactions costs for borrowers are also minor. Ohio taxpayers bear the largest burden -- \$4 million per year in foregone interest earnings on State of Ohio deposits plus modest application processing costs in the Treasurer's Office.

The cost of using the FmHA guaranteed loan program in terms of loan officer time commitment is high: 12 to 16 hours per borrower. FmHA clearly needs to address the problems of complicated application procedures, slow turnaround and cumbersome loan servicing requirements. Borrower benefits include an opportunity to continue farming and lower interest expenses. The large cost for lenders needs to be weighed against a significant benefit, i.e. shifting most of the credit risk to taxpayers.

As noted at the outset, this is a progress report on a comprehensive study of credit program costs and benefits. We believe that the results will prove useful in the current era of tight federal and state budgets.

Table 1. Time Required to Service Agricultural Loans

A.	Typical non-real estate loan (existing customer)	<u>FCS</u>	<u>Banks</u>
		<u>Average Hours Per Year</u>	
	Fill out or help complete loan application	1.08	.81
	Review application and financial statements	1.56	1.47
	Maintain and update loan file	1.30	1.50
	Monitor progress and inspect collateral (farm visits)	1.61	2.29
	Loan Collection	.69	.76
	Credit checks, court house visits, etc.	<u>.74</u>	<u>.79</u>
	Total Hours Per Year Per Customer	6.98 (3.40)*	7.62 (4.10)
B.	Average additional hours for a <u>new</u> non-real estate loan customer	3.16 (3.24)	3.45 (3.30)
C.	Average hours for a <u>new real estate</u> loan customer	7.40 (5.60)	6.53 (6.07)
D.	Average hours per year for <u>existing real estate</u> loans	1.65 (2.04)	2.41 (2.77)
E.	<u>Additional</u> hours per year for a delinquent loan	6.40 (4.90)	6.96 (5.96)
F.	<u>Additional</u> hours to restructure a loan	N/A**	7.61 (7.32)
G.	<u>Additional</u> hours to foreclose on a loan	N/A**	22.5 (35.3)

*Numbers in parentheses are standard deviations.

**Not available.

Table 2. Use of Third Party Specialists**2A. Loan Servicing**

Service Used	Cost of Service Per Borrower
Compile information and construct the financial statements	\$ 383
Fill out or help complete loan application	80
Appraise real estate security	410
Appraise or inspect non-real estate collateral (farm visits)	141
Environmental audits	1,007
Loan Collection	100
Credit checks, court house visits, etc.	45
<i>Who pays for these services?</i>	
Lender - 9%	Borrower - 62% Both - 29%

2b. Additional Third Party Costs Involved with Foreclosures

Service Used	Average Cost of Service Per Foreclosure
Attorney	\$1,551
Court Fees	442
Accountants	117
Appraiser	436
Auctioneers	5 to 7% of Appraised Value

Table 3. Relative Importance of Measures Used or Factors Considered to Evaluate Agricultural Lending Risks

	FCS					Banks				
	1	2	3	4	5	1	2	3	4	5
	-----Percent Responding*-----									
Balance Sheet	83	12	5	-	-	80	18	2	-	-
Profit and loss statement (income statement)	90	10	-	-	-	88	8	3	-	-
Cash flow analysis	29	19	24	24	4	71	20	8	-	-
A computed formula to quantify borrower risk	42	36	12	-	10	2	18	7	7	67
Solvency test (e.g. debt/asset ratio)	55	31	10	4	-	27	50	13	3	7
Liquidity test (e.g. current ratio)	50	38	10	2	-	23	57	7	5	8
Profitability ratio (e.g. return on assets)	14	29	36	7	14	10	45	20	7	18
Repayment capacity (e.g. cash flow ability)	100	-	-	-	-	78	15	7	-	-
Financial efficiency ratio	7	30	34	12	17	7	31	34	8	20
Collateral relative to loan size	52	36	10	2	-	57	32	8	2	2
Off farm income	26	55	19	-	-	15	57	20	8	-
Compensating balances in your bank	5	2	17	5	71	7	37	32	15	10
Management ability	64	24	12	-	-	58	37	3	2	-
Length of the relationship with the borrower	9	50	29	7	5	18	50	27	-	3
Discretion of loan officer based on experience	5	56	24	3	12	14	47	32	3	3
Weather and other risks of production	7	43	31	17	2	7	34	34	15	10
Type of agriculture product being produced	5	38	38	17	2	7	43	27	12	12

*Scale for responses was: 1 - High Priority; 2 - Moderate Priority; 3 - Low Priority; 4 - Only for Higher Risk Borrowers; 5 - Do Not Use or Irrelevant

Table 4. Operating Loan Interest Rate Pricing, Spring, 1992

	FCS		Banks	
	Rate (%)	% of Loans	Rate (%)	% of Loans
Lowest Risk	7.6	34.9	7.88	26.0
2nd Risk Category	8.2	24.3	8.64	32.7
3rd Risk Category	8.7	20.2	8.99	31.7
4th or Higher Risk Category	9.2-9.7	20.6	9.68	9.6
Same Rate for All Loans	-	-	8.62 or (prime + 2.12)	

Table 5. Loan Officers' Estimates of Additional Time per Customer to Participate in Government Credit Programs

		Additional Minutes Per Customer	
		FCS	Bank
A.	Ohio Linked Deposit Program		
	Completion of Linked Deposit Application	38	39
	Distribution of the Funds	24	23
	Loan Monitoring	28	26
	Collection of Loan Payments	24	19
	Processing State Deposits	18	26
	Total Additional Minutes	132	133
	Standard Deviation	(108)	(119)
		Additional Hours Per Customer	
		FCS	Bank
B.	FmHA Guaranteed Loan Program		
	Application	9.2	5.64
	Distribution of Funds	1.5	1.27
	Loan Monitoring	3.9	2.81
	Collection	1.5	2.57
	Total Additional Hours	16.1	12.29
	Standard Deviation	(15.2)	(12.22)

Table 6A. Loan Officers' Opinions of Ohio Linked Deposit Program

	Mean Response*	
	FCS	Banks
Enables borrowers to use interest savings for other production of capital uses	1.91 (1.05)**	1.74 (0.84)
Interest savings improves short-run cash flow position for borrowers	1.60 (0.92)	1.62 (0.67)
Without acceptance in Linked Deposit Program borrower's application would be denied	4.00 (0.94)	3.83 (0.87)
The only benefit for those borrowers accepted is a reduction in interest payments	2.50 (1.18)	2.59 (1.03)
Linked Deposit savings are used to pay off existing debt of farming operation	3.09 (1.10)	2.95 (1.04)
Linked Deposit savings too small to make an impact	3.35 (1.10)	3.38 (1.03)
Interest savings increase the credit quality of the borrower	3.33 (1.11)	3.09 (0.95)
Interest savings just a short-term fix, and do not improved long-term finances for the borrower	2.70 (1.01)	2.74 (1.11)
Very minimal paperwork by lender for benefits received by borrower	2.79 (1.19)	2.31 (1.04)
Another source of funds for association/bank	3.53 (1.07)	2.45 (1.02)
Enables borrower to take advantage of borrowing \$100,000 at reduced rates for total operating capital needs	2.19 (0.98)	2.09 (0.88)
Helps attract customers or retain current customers	2.72 (1.13)	2.78 (1.19)

*Mean response based on the following scale: 1 - Strongly Agree; 2 - Agree; 3 - Neutral of Uncertain; 4 - Disagree; 5 - Strongly Disagree

**Numbers in parentheses are standard deviations.

Table 6B. Loan Officers' Opinions of Possible Changes in Ohio Linked Deposit

	P rogr am	
	Mean Response*	
	FCS	Banks
Increase interest savings for higher risk customers	3.14 (1.25)**	2.91 (1.11)
Increase the \$100,000 borrowing cap	3.63 (1.08)	3.12 (1.16)
Change the date of distributing funds	3.12 (1.04)	2.84 (1.01)
Should allow better quality borrowers to also participate, rather than only high risk borrowers	3.40 (1.28)	3.16 (1.04)
Expand program to real estate or equipment loans	2.88 (1.40)	2.63 (1.15)
Application paperwork should be reduced	3.23 (0.88)	3.47 (0.86)
Program should not be changes	2.93 (1.07)	3.11 (0.91)
Discontinue program because not all borrowers can participate in program	3.91 (1.10)	3.96 (1.01)
Discontinue program; costs are too high relative to program's benefits	3.74 (1.24)	3.88 (1.08)
Discontinue program until economic conditions improve in the state	3.93 (0.95)	3.98 (0.88)

*Mean response based on the following scale: 1 - Strongly Agree; 2 - Agree; 3 - Neutral of Uncertain; 4 - Disagree; 5 - Strongly Disagree

**Numbers in parentheses are standard deviations.

Table 7. Loan Officers' Opinions of FmHA Guaranteed Loan Program

	Mean Response*	
	FCS	Banks
Turn around time (application to guarantee approval) is too long	1.55 (0.68)**	2.00 (0.99)
FmHA guidelines for loan approval are too strict	2.33 (1.14)	2.30 (1.10)
The 90 percent guarantee is too low	2.90 (1.14)	3.59 (0.86)
Loan guarantees reduced the credit risk of the borrower	2.10 (1.09)	2.19 (1.21)
Application procedure is too complicated	1.69 (0.79)	1.81 (0.86)
Interest Rate Assistance Program should be available to more borrowers	2.73 (1.18)	2.34 (1.17)
Servicing requirements are too cumbersome	2.15 (0.79)	2.45 (0.94)
Payback time on guarantee if loan defaults is too long and/or complicated	2.55 (0.64)	2.60 (1.13)
Ability to sell loan guarantees on the secondary market is an incentive to use the program	3.47 (0.82)	3.21 (0.90)
Brings new customers into the bank's portfolio	4.11 (0.76)	3.05 (0.90)
Allows previous customers who fell into hard time to continue farming	2.48 (0.92)	2.27 (0.90)
Transaction costs for borrowers are too high	2.74 (1.10)	2.88 (1.06)
The FmHA Approved Lender program has streamlined the application procedure	3.34 (0.98)	3.29 (1.15)

*Mean response based on the following scale: 1 - Strongly Agree; 2 - Agree; 3 - Neutral or Uncertain; 4 - Disagree; 5 - Strongly Disagree

**Numbers in parentheses are standard deviations.

Selected References

- Ellinger, Paul N. and Peter J. Barry. "Agricultural Delivery Costs at Commercial Banks," *Agricultural Finance Review*. Vol. 51, 1991, pp. 64-78.
- Froerer, Landell S., Dale W. Adams, and Warren F. Lee. "Assisting Farmers Through Concessionary Loans: Insights from the Ohio Linked-Deposit Program," *North Central Journal of Agricultural Economics*, 10:1, January 1988, pp. 134-43.
- Klinefelter, Danny A. "FmHA Guaranteed Loan Programs: Problems and Opportunities," *AgriFinance*, December 1991, pp. 36-37.
- LaDue, Eddy L., Warren F. Lee, Steven D. Hansen, Gregory D. Hansen and David M. Kohl. *Credit Evaluation Procedures at Agricultural Banks in the Northeast and Eastern Cornbelt*. AE Res. 92-3, Department of Agricultural Economics, Cornell University Agricultural Experiment Station, February 1992.
- U.S. Department of Agriculture, Economic Research Service. *Agricultural Income and Finance: Situation and Outlook Report*. AFO-44, February 1992.