GUARANTEE SCHEMES: AN ALTERNATIVE
TO THE SUPERVISED CREDIT PROGRAM

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by

Marife T. Magno and Richard L. Meyer**

I. INTRODUCTION

In response to a perennial problem of inadequate volume of credit going to the so-called "socially-desirable projects", in particular to agriculture and indigenous industries, the government instituted several supervised credit programs (SCPs). More popular among these programs were Masagana 99 (rice) and Maisagana (corn) which were launched in 1972.

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To support the SCPs, liberal selective credit policies, such as low interest rates and cheap rediscounting facilities have been adopted. As noted in various studies (TBAC 1985, Lamberte and Lim 1987), the SCPs were on the whole a failure. These credit subsidies did not reach the targeted clientele but rather led to misallocation of resources, disintermediation, inflation, high loan arrearages and loan failures which made banks more averse in extending credit to agriculture and indigenous industries. Hence, the sector remained as indebted and unbankable as before.

The government embarked on a series of financial reforms starting in 1980. Knowing that the major drawback of the previous credit programs stems from the subsidized interest rates and cheap rediscounting policy, the financial reforms included deregulation of bank interest rates and the alignment of rediscount rates to the market rate. By 1985, the interest rates and rediscount rates were wholly market oriented. In effect, interest rate subsidies to the priority sectors were eliminated.

The relaxation of interest rates, however, did not produce the desired results but has contributed to the reduced flow of loans to the socially desirable projects (TBAC 1985). It seems that the risk and default conditions surrounding agriculture and indigenous industries have not significantly improved, and therefore, any increase in deposits resulting from interest rate liberalization would not necessarily flow into these sectors. Banks are still reluctant to increase their exposures to agriculture as well as the indigenous industries.

To date, the SCPs are slowly being phased out. This does not mean, however, that direct government intervention in the credit market has been eliminated. Government intervention is still considered to be necessary to complement the liberalization policies. In place of the SCPs, risk-reducing programs are being emphasized. By risk-reducing programs, we refer to the credit guarantee programs. These programs are the latest form of intervention in the financial market aimed at relieving the risk-burdens faced by financial institutions in lending to the priority sector. In the previous SCPs, funds for on-lending mainly came from the government with financial institutions serving as conduits. Under the risk-reducing program, however, funds for on-lending come from the financial institutions. The government supports them by assuming certain portion of the risk of default.

This paper examines the effectiveness of the credit guarantee programs in increasing the amount of credit that goes to agriculture and indigenous industries. Specifically, the following issues will be addressed: (1) Do guarantee programs lead to <u>additionality</u> in agricultural lending; (2) Do guarantee programs contribute to small loans; (3) Do guarantee programs encourage banks to use their own funds; (4) Do guarantee programs reduce the cost of lending to banks; and (5) How cost effective are the guarantee programs.

The study focuses on the four existing guarantee programs of the government, namely: (1) the Guarantee Fund for Small and

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Medium Enterprises (GFSME); (2) the Industrial Guarantee and Loan Fund (IGLF); (3) the Quedan Guarantee Program (QGP) and (4) the Crop Insurance Program (CIP).

The paper will be organized as follows: Section II presents the conceptual framework. Here the hypothesis of the study as well as the indicators to test this hypothesis are presented.

Section III describes the special features of each guarantee program. The terms and conditions of loans under the guarantee programs will also be emphasized.

Sections IV and V discuss the overall performance of the guarantee programs. Section IV presents information on how the guarantee funds have been utilized in terms of the type of banking institutions, the nature of investment and loan size. The operational performance of the guarantee institutions/ agencies is also presented. Section V discusses the overall impact of the guarantee programs on the basis of the hypothesis and the indicators presented in Section II.

Sections VI and VII discuss the performance of the guarantee programs in terms of banks' response to and assessment of the programs. Section VI uses primary data from the Comparative Bank Study Survey (1987). Section VII focuses on the case of the GFSME program.

The last two sections present the conclusions of the study and some policy recommendations.

II. CONCEPTUAL FRAMEWORK

Lending institutions usually charge a higher premium for risk for borrowers in the priority sectors of the government than they do for the borrowers in the non-priority sectors. (Johnson, 1974, Khatkhate and Villanueva 1978, Lipton 1979, Pischke 1986). This is because the lenders associate an extra-normal risk to the priority sector. A program such as the credit guarantee scheme, which aims to reduce the perceived risk-prevailing in agriculture and indigenous industries is, therefore perceived as being an effective way to reduce lender risk and increase lending.

The impact of a guarantee program on the supply of credit to the priority sector can be analyzed using a supply-demand model developed by Gonzalez-Vega (1976). The assumptions of the model are: First, the banks operate under a competitive market. Second, there are only two types of borrower. One type is a risky borrower, in the sense that the bank is not familiar with the borrower or the project the borrower proposes to undertake with a loan. Projects in agriculture and indigenous industries frequently belong to this category. The other type is a less risky borrower, with whom the bank is acquainted with and/or whose projects are well known. Third, the borrowers have an identical demand for credit. This means that the marginal revenue curves of both borrowers are similar. The latter assumption is important to isolate the effects on interest rates of differences in their initial endowments from that of differences in the cost of lending. Relaxation of this assumption, however, will not significantly alter the findings since we are dealing here with

elasticities. And fourth, cost of funds and lending costs are identical for both borrowers and differences arise only in the cost associated with default.

The cost of lending is expected to be relatively higher for loans to the risky borrowers than to the less risky borrowers. The difference in cost is due to the higher risk premium associated with the risky borrower. In effect, the marginal cost (MC) curves of loans to the two borrowers differs, where marginal cost curve is steeper for the risky borrower than the less risky one. This means that the additional cost per peso of loan granted is higher for the risky borrower.

The difference in the marginal cost of the two borrowers would imply different lending interest rates for both. This is because banks are profit-maximizers and therefore would charge an interest rate at the point where MR = MC. In Figure II-1, this is represented by the intersection between the MC curves and the demand curves. The demand curve for the whole banking industry is actually equal to the value of the marginal productivity (VMP) of loans. Hence, the optimizing point is where MC = VMP. And the equilibrium quantity and price for each borrower, considering no interest rate ceilings and liquidity constraints, is L^*_1 and r_1 for the risky borrower and L^*_2 and r_2 for the less risky borrower.

With effective guarantee programs, the risk-burden in the priority sector is reduced and thus, lending rates to risky borrowers decreases which result in an increase going to them.
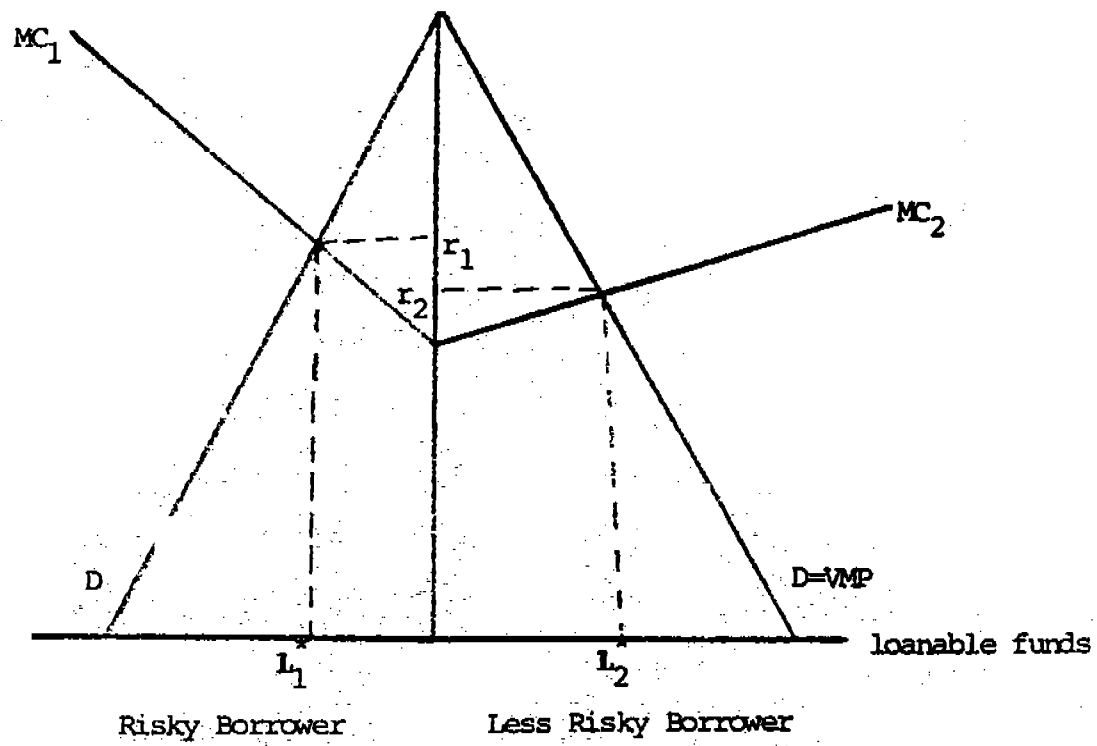
Figure II-1.   CREDIT ALLOCATION FOR RISKY BORROWER AND
LESS RISKY BORROWER, WITHOUT GUARANTEE

This is because the risk premium which creates the difference between r_1 and r_2 is eliminated. The guarantee shifts the MC of risky borrowers to MC'_1. In effect, risky borrowers become competitive with the less risky borrowers. Figure II-2 illustrates the situation. The decrease in MC of risky borrowers increased the amount of loan to L'_1 which is equal to L^*_2. This suggests competitiveness of and elimination of bias against the risky borrowers.

Suppose, however, that the lender has a liquidity constraint, such that available loanable funds is only L^*_1 plus L^*_2 (referred to as $\bar{L}$). Then banks would allocate $\bar{L}$ such that $MC_1 = MC_2$. Since MC_2 is lower than MC_1, then banks would service the less risky borrower first before the risky borrower. This means that with $\bar{L}$, banks would still charge the interest rates r_1 and r_2 even with a guarantee and thus, there would be no increase in the amount of credit to the risky borrower. To increase the amount of loans to the less risky borrower means that L^*_2 have to decrease to L'_2. This is possible if an interest rate subsidy equal to abc is paid to the bank (see Figure II-3). The interest subsidy decreases the lending cost to the risky borrower and shifts MC_1 to MC'_1. In effect, loans to the risky borrower increase to L'_1. This increase is equal to the decrease in loans to the less risky borrower ($L^*_2 - L'_2$).

Decreasing loans to the less risky borrowers is not costless. It should be noted that the less risky borrowers are the bank's prime or regular clients and it would be difficult for
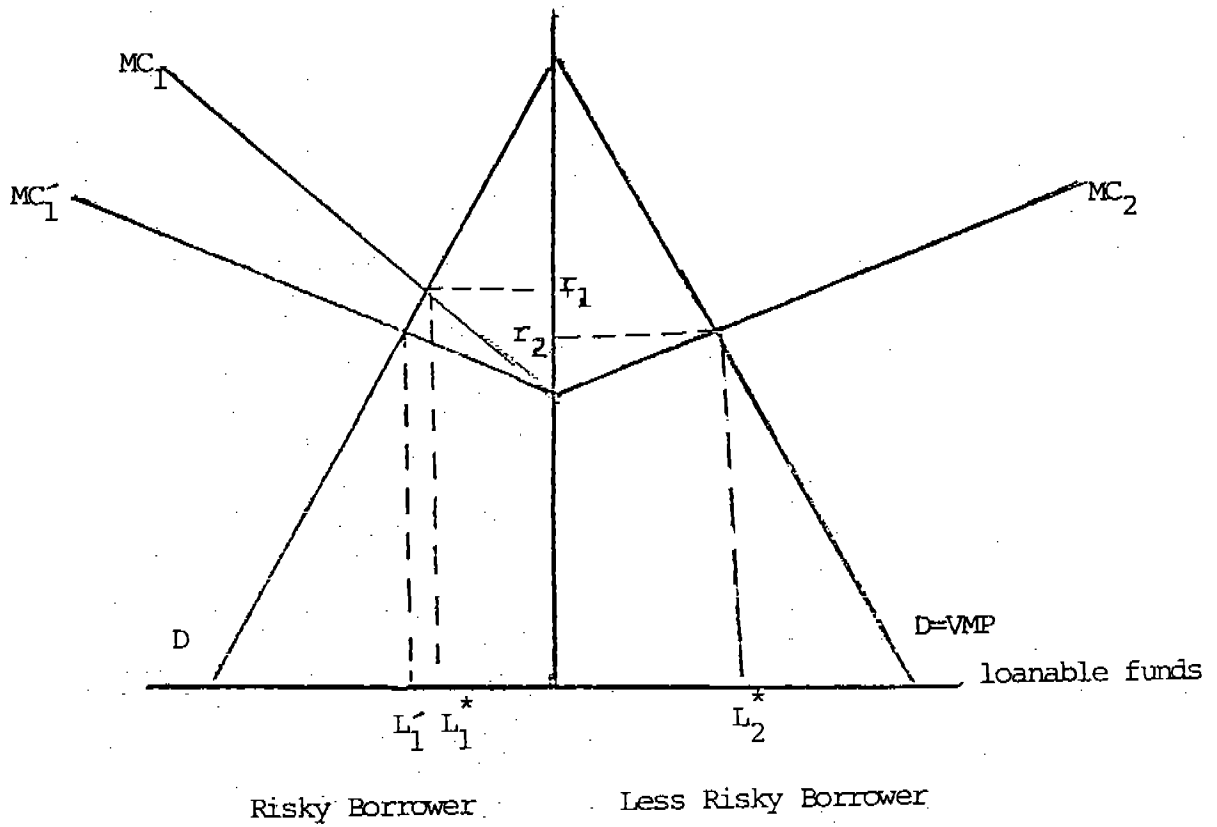
Figure II-2. CREDIT ALLOCATION FOR RISKY BORROWER AND
LESS RISKY BORROWER, WITH A GUARANTEE

MC_1

MC_1'

MC_2

a

r_1

b

r_2

c

D=VMP

D

loanable funds

L_1' L_1^*

L_2' L_2^*

Risky Borrower   Less Risky Borrower
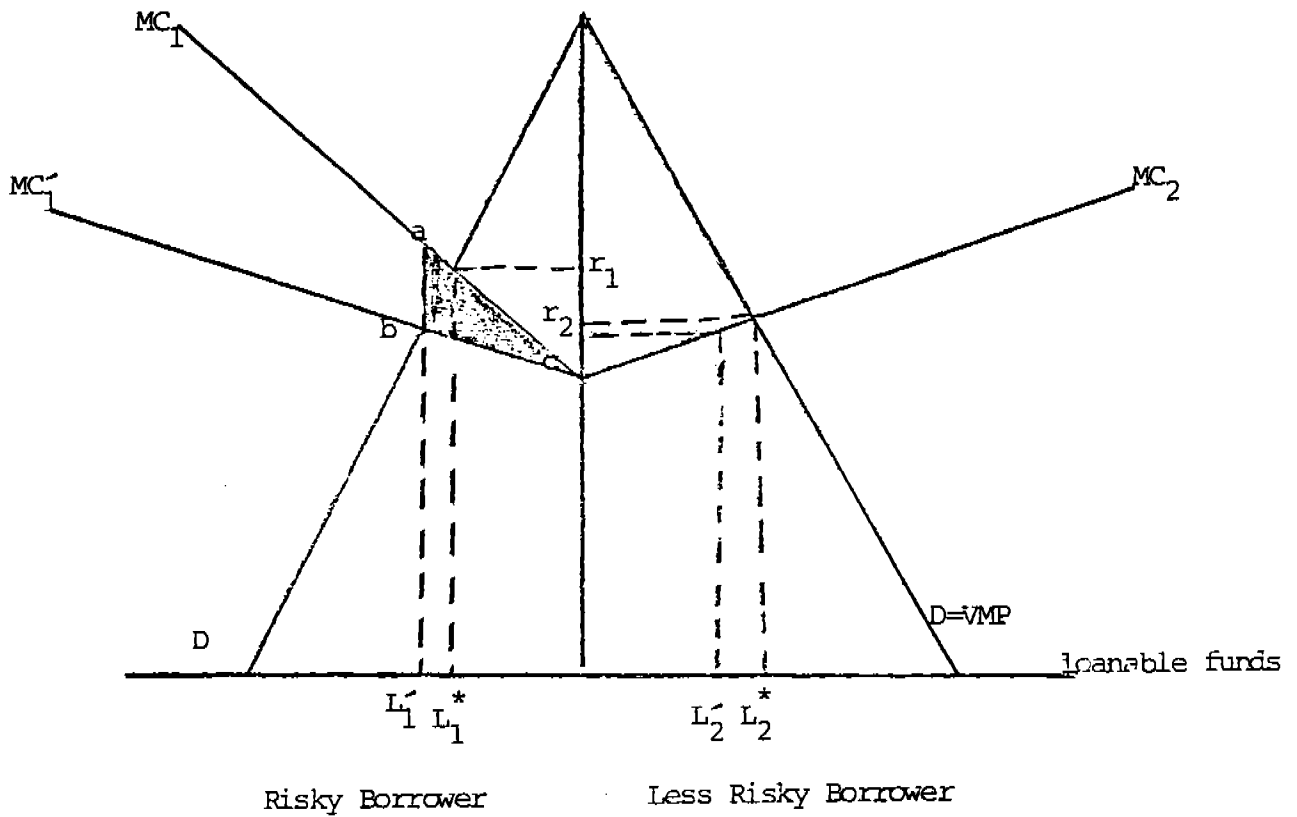
Figure II-3.   CREDIT ALLOCATION OF RISKY BORROWER AND LESS RISKY
BORROWER WITH LIQUIDITY CONSTRAINT AND WITH GUARANTEE

the bank to turn them down. To maintain long-term relations with clients, it is expected that they would usually service their old clients first before servicing a new client. Under this situation, there may be no increase in loans to risky borrowers even with a guarantee or the amount of subsidy needed would be higher.

The above findings suggest the need for additional loanable funds to fully realize the effect of a guarantee for institutions with liquidity constraint. There are two ways of achieving this: one is through rediscounting or selling of loan papers and the other is through more extensive deposit mobilization.

The effect of rediscounting or selling loan papers is illustrated as Figure II-2. Rediscounting loan papers occurs when banks liquify or secure funds from either the Central Bank or the guarantee programs by "selling" the guaranteed loans. In this case, there maybe an increase in the amount of loans to the risky borrower without a decrease in loans to the less risky borrower. Hence, less risky borrowers are not adversely affected. And, no subsidy is paid to the bank. The additional funds, however, come mainly from government funds and not the bank's own funds.

On the other hand, if additional funds were met through deposit mobilization (see ACPC 1988), banks would be using their own funds for lending and substitution of bank funds by government funds as well as interest rate subsidy is eliminated. The above implications suggest that a credit

guarantee can be an effective means of increasing credit to the priority sector under an effective deposit mobilization scheme. In a nutshell, deposit mobilization would be a by-product of an effective guarantee scheme since banks would exert extra effort in increasing loans to the priority sectors.

The appropriateness of the design and implementation of guarantee schemes is, however, also crucial to the effectiveness of the programs. Hence, even with an effective deposit mobilization the downward shift in the MC curve may be small compared to what the designers of the program expects. There are several reasons why this can happen. First, there is a cost of participation in the guarantee programs (e.g., supervision and monitoring cost, guarantee fees, additional paperworks due to additional requirements of the Guarantee Board, etc.).

Second, banks may perceive a "post-exhaustion cost." That is the cost of collection and the cost of foreclosure and claiming for guarantee in case of a default.

Third, the effectiveness of guarantee programs is reduced due to the moral hazard effect. This may also be referred to as the "incentive effect", which brings out the "dole-out" mentality among borrowers. That is, because risky borrowers are aware that the government are "backing-up" their loans, they may have more incentive to default. Moral hazard is also possible among financial institutions. In their case, they may liquify riskier

guaranteed loans while use their own funds for the less risky loans.

On the basis of the above discussions, it is hypothesized that under certain circumstances guarantee programs can help increase the amount of credit to the priority sectors. This is called the "additionality" hypothesis.

There are three possible additionality situations that could occur. First, that there is an increase in formal credit to agriculture at the expense of the non-agricultural activities. Under this situation, the additionality occurs because of a substitution in the allocation of loanable funds. For a substitution to occur an interest subsidy has to be paid to the bank. If the subsidy payment is taken from income taxes then the guarantee program becomes a guarantee cum tax subsidy scheme.

The second additionality case occurs when there is an increase in loans to the priority sectors through a guarantee program with rediscounting without a corresponding decrease in loans to the non-priority sector. In this case, there is net additionality but this increase comes mainly from government funds. In effect substitution also occurs where government funds substitute for bank funds.

The third case happens when there is an increase in agricultural loans through a guarantee with deposit mobilization. As in the previous case, there is net additionality since loans to the non-priority sector is not affected. The increase, however, comes from the banks' own funds. Hence, no substitution

takes place. Among the additionality cases, this case is the ideal scheme because it implies banking institutions initiative in lending to priority sectors.

To test the additionality hypothesis, the following indicators are used. First, the ratio of risky loans (i.e., in this case agricultural loans) to the total loan portfolio of banking institutions or the ratio of guaranteed loan to total agricultural loans of banking institution. With the guarantee program, these proportions should have been increasing. In a cross-section analysis of banks, both ratios should be higher for banks participating on the guarantee program than for the non-participants. These measures, however, only indicate the degree of participation of banks in lending to agriculture and in guarantee programs but not their willingness to invest their own funds for agricultural activities.

A second indicator is the ratio of agricultural loans to deposits of banking institutions. Similarly, this ratio should also have been increasing. If banks' loanable funds are sourced mainly from deposits, an increasing ratio suggests willingness of banks to invest their funds in agriculture. On the other hand, if loanable funds are not taken mainly from deposits (e.g., government funds), then this ratio would only roughly reflect whether the increase in formal credit to agriculture is due to banks' own funds. A better measure, however, is the ratio of rediscounted agricultural loans to the total agricultural loans or the proportion of the rediscounted guaranteed loans to the

total loans guaranteed. An increase in these ratios would imply that banks have been using the guarantee programs as a liquidity source. In contrast, a decrease implies that the guarantee programs have been successful in encouraging banks to lend their own funds to agricultural activities.

III. BRIEF DESCRIPTION OF THE GUARANTEE PROGRAMS

There are four guarantee programs currently available to the private banking system. They are: (1) the Guarantee Fund for Small and Medium Enterprises (GFSME); (2) the Industrial Guarantee and Loan Fund (IGLF); (3) the Quedan Guarantee Program (QGP); and (4) the Crop Insurance Program (CIP). Recently, funds from the various SCPs have been consolidated under the Comprehensive Agricultural Loan Fund (CALF). This fund provided additional guarantee resources for the existing guarantee programs.

1. The GFSME

The program was established in February 1984 to encourage banking institutions to lend their own funds to small and medium size-enterprises engaged in either production or processing. The program operates under several subsystems.

(a) Accreditation Subsystem

This subsystem evaluates the financial institutions that will grant loans under the program.

(b)   Interest Rate Subsidy Subsystem

This subsystem serves as a vehicle by which the cost of borrowing is regulated while providing a reasonable spread to lending institutions.

(c)   Liquidity Subsystem

This subsystem enables financial institutions to liquify their loan portfolio by selling loan papers to GFSME. This mechanism has similar features to the Central Bank rediscounting window only that the loan papers are sold at par but the 15 percent risk is retained by the bank.

(d)   Mortgage Subsystem

This subsystem acts as a secondary market which promotes trading of loan papers among participating institutions and other investors.

(e)   Insurance Subsystem

This subsystem is intended to minimize lending risks. Here GFSME assumes at most 85 percent of credit risk in lending to its eligible borrowers.

2. The IGLF

The program is a revolving fund established in 1952, which provides both financing and guarantees for cottage, small and medium sized industrial and agro-industrial enterprises. There are three possible financing schemes under the program:

(a)   Special Time Deposit (STD)

This program provides full financing for loans approved under the program.

(b)   Combination of STD and Guarantee

This program provides for financing and guarantees a portion of the deficiency in collateral requirements.

(c)   Straight Guarantee

This scheme applies when banks utilize their own funds for loans eligible under the IGLF. In this case, a guarantee up to a maximum of 85 percent is applied.

(3)   The QGP

This program is operated by the Quedan Board which was established in June 1978 primarily to supplement the capital requirement of businessmen engaged in marketing of grains and other basic food commodities. The program operates under three leverage modes:

(a)   Credit Guarantee Mode

This mode is similar to the straight guarantee scheme of IGLF. It does not provide financing but guarantees a maximum of 80 percent of loans made with banks' own funds. There are three financing programs under this mode: (1) the Quedan for Food Traders and Processors (FTP); (2) the Quedan for Farmer's Group (FG); and (3) the Quedan for Sugar.

(b) Credit-Sharing Mode

This mode is a fund partnership scheme where the Quedan Board provides 50 percent of the financing and 100 percent guarantee on the other 50 percent provided by the lending institutions. In this mode interest rates ceilings are set by the Board. The financing programs under this mode are: (1) the Quedan financing for market retailers (MRP); and (b) the Quedan financing for food and agriculture marketing enterprises (FAME).

(c) Credit Sourcing Mode

This mode provides 100 percent financing to eligible projects. In this mode, the Quedan Board has a tie-up with the Land Bank and IGLF. The programs under this mode are: (1) the Quedan Financing for Intensive Rice Production and Expanded Corn Production (IRPP/ECP); and (2) the Livelihood Financing for Employees (LIFE).

(4) The CIP

This program was established in May 1981. It differs from the other guarantee programs in that it does not directly provide guarantees to loans granted by financial institutions. Rather it provides protection to farmers, in particular rice and corn farmers, by insuring farm losses due to natural calamities. Therefore, lending institutions are indirectly provided guarantee cover since the program will cushion them from the effects of loan defaults due to crop failure. This occurs because the proceeds of the insurance claims of borrowing farmers are applied directly against the borrower's outstanding loan.

In sum what is common to all these guarantee programs is the objective of developing and supporting lending institutions initiatives in granting loans to the priority sector. An important point to note is that the various guarantee programs have several features, and providing guarantees for loans made by financial institutions to priority sectors is only one feature. The other features include among others a liquidity mechanism, credit sharing arrangements, and interest rate subsidies, and they could serve as the main attraction of the program to a lender rather than the guarantee itself.

The terms and conditions of the loans eligible for guarantee or insurance under each guarantee schemes are summarized in Table I. Except for IGLF, all other programs cater to the agricultural sector. The borrowing rate for GFSME and IGLF are fixed for the term of the loan and determined by the Guarantee Board. In contrast, under the QGP and the CIP interest rates are based on the prevailing commercial rates.

IV. UTILIZATION OF GUARANTEE FUNDS

Data available from the various guarantee programs show that the amount of guaranteed loans has been increasing in <u>real terms</u>. This is revealed by the positive annual growth rates for all guarantee programs (Table 2-4). GFSME showed the highest growth rate (113.6%).

The tables further reveal that the bulk of loans guaranteed have been originated by commercial banks (KBs). This is followed

Table 1. SPECIAL RISK-REDUCING PROGRAMS

Program	Eligible Projects	Eligible Borrowers	Loan Purposes	Maximum Loanable Amt.	Interest Rate	Maturity Period	Mode of Payment	Extent of Guarantee	Collateral	Fees/Charges	Number and Type of Accredited Channels
1. GFSME	Projects involved in the direct production and/or processing of food intended for biological consumption; those indirectly involved in food production and other agri-projects majority of its produce is intended for export. A. Small Scale - total project assets of not less than ₱62,500 but not more than 2.5M after financing B. Medium Scale - total project assets of not more than ₱2.5M but not exceeding ₱10M after financing	A. Small Scale Projects- individuals or enterprises B. Medium Scale Projects- Filipino stock corporations	A. Fixed Assets acquisition B. Construction of plant facilities C. Working Capital D. Refinancing of existing loans with other financial institutions that are current in status not to exceed 50% of the total loan approved.	A. Small Scale loan- ₱250,000 to ₱2.8M B. Medium Scale loan - more than ₱2M to ₱8M C. Small Loan Package Program ₱50,000 to 500,000	Determined by GFSME every quarter. Fixed for term of loan approved for guarantee	A. Working Capital- maximum 5 years, inclusive of 1 year grace period on principal B. Acquisition of fixed assets- maximum of 10 years inclusive of 2-year period on principal	equal monthly or quarterly amortization of principal and interest	85% of outstanding loan	- do -	a) origination fee - not more than 3% of the principal loan amount payable upon loan approval and deductible from the proceeds of the loan b) Guarantee Fee- 2% per annum of 85% of the outstanding loan value at the start of the year payable annually in advance c) Documentary stamps, notarial fees, mortgage registration fees, transfer capital gains & other taxes. Fees should not exceed 1.5% per annum (for loans not exceeding ₱2.0 M) or 0.75% per annum (for loans over ₱2.0M) of the outstanding loan amount.	As of May 1987 Commercial banks = 13 Development banks = 9 Other thrift banks = 3 Total 24

a/ includes 1 year grace period
b/ includes 2 years grace period
c/ IRF = Integrate Rural Financing
d/ ALF = Agricultural Loan Fund

Program	Eligible Projects	Eligible Borrowers	Loan Purposes	Maximum Loanable Amt.	Interest Rate	Maturity Period	Mode of Payment	Extent of Guarantee	Collateral	Fees/Charges	Number and Type of Accredited Channels
2. IGLF	Those involved in the establishment or expansion of an industrial, agro-industrial or mining enterprises including manufacturing concerns and those service industries supportive of manufacturing activities (see Annex C for complete list of eligible projects).	A. Cottage enterprise total assets over P50,000 but not more than P500,000 before financing. B. Small-Scale = total assets of more than P500,000 but not exceeding P5M before financing.	A. Purchase of factory site for new and expansion project. B. Construction of factory buildings C. Purchase of machinery/equipment/ fixtures & installation costs D. Permanent Working Capital	A. For cottage industries- P0.4M B. Small-Scale P4.0M C. Medium Scale- P16.0M	Fixed term to be determined by the IGLF every quarter.	A. Fixed Asset acquisition = 12 yrs. inclusive of 3 yrs. grace period on principal B. Working Capital 7 yrs. inclusive of 2 yrs. grace period on principal B.1 Packing Credit Loans = not exceeding 180 days	equal quarterly amortization of principal and interest.	a) Collateral Short Guarantee= 25% of the loan b) Credit-Risk Guarantee Cottage=60% and small industries. Medium = 40% industries.	left to the discretion of financial institutions. Acceptable collaterals are: a) promissory note supported by real estate or chattel mortgage b) letters of credit c) confirmed purchase orders or sales contracts	a) Penalty charge 5% p.a. imposed on financial institutions which may be passed to borrowers. f/ b) Guarantee fee = 2% of guaranteed amount	Commercial banks = 13 Private development banks = 11 Specialized govt. banks = 2 Savings and loan banks = 3 Non-bank financial intermediaries = 2 --- Total 31
		C. medium-scale = total assets of more than P5.0M but not exceeding P20M before financing.				B.2 Production credit = not exceeding 360 days			Deed of Pledge on the negotiable quedan	guarantee fee- 1% per annum collected on banks at a graduated rate based on the amount of loan which will not be passed to the borrowers.	Universal banks = 10 Commercial banks = 14 Branches of Foreign banks = 3 Specialized govt. banks = 2 Savings and Loan Banks = 16 PDBs = 15 Rural Banks = 98 --- Total 158
e/ 3. QGP a) Quedan Financing for grains and food businessmen (includes milled rice corn grains, sorghum, soybeans, mongo and peanuts)		a) NFA licensed or registered food businessmen b) farmer possessing NFA passbook c) Samahang Nayon duly registered with NFA d) NFA licensed Area Marketing Coop.	Movement of milled rice, corn grains, sorghum soybean, mongo, peanuts, sugar, tobacco, copra	Prescribed by CB	Prevailing commercial rate.	Between 60-180 days milled rice, corn grains = 90 days maximum Sorghum/unshelled peanuts- 120 days maximum Soybean/mongo- 150 days maximum All loans are renewable for another term	Upon Maturity	80% of outstanding loan			

e/
Features will only include Quedan Financing programs covered by the guarantee.

f/
Maybe passed on to sub-borrower for collateral short guarantee but shall be shouldered by financial institution in the case of a credit-risk guarantee.

Continued..... Table 1

Program	Eligible Projects	Eligible Borrowers	Loan Purposes	Maximum Loanable Amt.	Interest Rate	Maturity Period	Mode of Payment	Extent of Guarantee	Collateral	Fees/Charges	No.& Type of Accredited Channels
3. QGP									deed of pledge on negotiable quedan	guarantee fee= 2% p.a. based on the amount of	same as (a)
b) Quedan Financing for palay and corn		legitimate farmer's group	provide farmer with cash for immediate needs	Depends on the quantity of stocks pledged	prevailing commercial rate	for palay = 180 days for corn = 90 days	upon maturity	70% of the outstanding loan		loan and will not be passed on to borrowers	
4. CIP	Projects involved in the production primarily of rice and corn	Originally rice and corn farmers. However, this has been extended to other crops as well with the integration of the CALF.	protects the farmer's investment from losses due to natural calamities and cushions lending institutions from the effects of loan defaults	Depends on the production needs of the farmer	prevailing commercial rate	- do -	- do -	may envision a 100% guarantee depending on the extent of the loss.	real estate mortgage or based on discretion of the banking institution	premium sharing **Rice** Borrowing farmer = 2.0% Banking institution = 1.5% Government = 7.5% Self-financed farmer = 2.0% Government = 9.0% **Corn** Borrowing farmer = 2.5% Banking institution = 1.5% Government = 9.0% Self-financed = 2.5%	no data

g/
Palay and corn covered by existing crop insurance are no longer eligible for guarantee coverage. However should CALF accredited banking conduits grant production loans for these crops they will be covered automatically by insurance.
h/
computed on the basis of the cost of production.

Source of data: GFSME, IGLF, QGFB, PCIC

Table 2. GUARANTEED LOANS GRANTED BY SELECTED BANKING INSTITUTIONS, GFSME, 1984-86
(IN REAL TERMS, 1972 = 100)

Banking Institution	1984 [a]				1985				1986				Average Annual Growth Rate (Amt.)
	No.	%	Amt. (₱M)	%	No.	%	Amt. (₱M)	%	No.	%	Amt. (₱M)	%	
KBs	5	41.7	3.1	64.6	30	52.6	11.0	55.0	52	61.9	12.3	56.2	99.2
PDBs	7	58.3	1.7	35.4	27	47.4	9.0	45.0	32	38.1	9.6	43.8	137.4
RBs [a]	-		-										
TOTAL	12	100	4.8	100	57	100	20.0	100	84	100	21.9	100	113.6

Source of data: GFSME

a/
as of February 1984

b/
RBs were excluded from participating in the program from
1984-86

Table 3. GUARANTEED LOANS GRANTED BY FINANCIAL INSTITUTIONS, IGLF, 1978-1986
(in real terms 1972 = 100)

Banking Insti-tution	1978				1979				1980				1981			
	No.	%	Amt. (PM)	%	No.	%	Amt. (PM)	%	No.	%	Amt. (PM)	%	No.	%	Amt. (PM)	%
KBs	30	21.4	5.8	26.5	23	15.6	4.5	18.7	29	17.1	13.2	25.8	28	12.6	12.5	16.9
PDBs	15	10.7	2.3	10.5	13	8.8	2.0	8.3	13	7.6	2.1	4.1	1	0.4	0.1	0.1
RBs	16	11.4	0.7	3.2	10	6.8	0.5	2.1	6	3.5	0.1	0.2	4	1.8	0.2	0.3
NBFIs	71	50.7	11.9	54.3	100	68.0	17.1	70.6	119	70.0	35.5	70.3	170	76.6	55.3	74.6
Others	8	5.7	1.2	5.5	1	0.7	0.1	0.4	3	1.8	0.3	0.6	19	8.6	6.0	8.1
Total	140	100	21.9	100	147	100	24.2	100	170	100	51.2	100	222	100	74.1	100

Table 3. (continuation)

Banking Institution	1982				1983				1984				1985				1986				Ave. Annual Growth Rate (%)	
	No.	%	Amt. (PM)	%	No.	%	Amt. (PM)	%	No.	%	Amt. (PM)	%	No.	%	Amt. (PM)	%	No.	%	Amt. (PM)	%	No.	Amt. (PM)
KBs	31	19.1	14.6	26.7	78	46.2	27.0	49.1	175	64.1	56.9	50.4	216	54.0	55.3	60.8	86	46.0	16.4	50.5	14.1	13.9
PDBs	16	9.9	4.1	7.5	-	-	-	-	6	2.2	1.3	38.0	112	28.0	19.9	21.9	75	40.1	12.3	37.8	22.3	23.3
RBs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.5	_	_	29.3	(32.5)
NBFIs	110	67.9	34.3	62.7	79	46.7	26.5	48.2	50	18.3	7.9	4.6	40	10.0	5.9	6.5	12	6.4	1.5	4.6	24.9	(22.8)
Others	5	3.1	1.7	3.1	12	7.1	1.5	2.7	42	15.4	18.1	6.9	32	8.0	9.8	10.8	13	7.0	2.3	7.1	6.2	(8.5)
Total	162	100	54.7	100	169	100	55.0	100	273	100	84.2	100	400	100	90.9	100	187	100	32.5	100	3.7	21.6

Source of data: IGLF

Table 4. GUARANTEED LOANS^a/ GRANTED BY TYPES OF
BANKING INSTITUTION AND BY PROGRAM, QGP, 1979
(IN REAL TERMS, 1972=100)

Years	KBs	PDBs	RBs	Totals
	(in million pesos)			
1979				
FTP	2.9		0.4	3.3
1980				
FTP	4.9		1.4	6.3
1981				
FTP	17.5	0.5	1.7	19.8
FG	0.2			0.2
Total	17.7	0.5	1.7	20
1982				
FTP	47.0	3.9	1.8	52.7
FG	0.3			0.3
Total	47.0	3.9	1.8	53.0
1983				
FTP	82.5	3.1	1.3	86.8
FG	0			
Total	82.5	3.1	1.3	86.8
1984				
FTP	48.7	0.1	0.5	49.4
FG	0			
MRP	0.8	0.3	0.1	1.3
Total	49.5	0.4	0.6	50.7
1985				
FTP	64.3	0.5	1.6	66.4
FG			0.2	0.2
MRP	2.4	2.4	1.0	5.8
Total	66.7	2.9	1.0	5.8
1986				
FTP	87.2	6.3	2.3	95.8
FG	0.1	0.2	0.3	0.6
MRP	0.8	4.0	1.8	6.6
Total	117.1	10.5	4.4	103.0
Ave. annual growth rates (%)				
FTP^b/	62.6	66.0	28.4	61.8
FG^c/	(10.9)	–	–	20.1
MRP^d/	–	265.1	324.3	125.3
All Programs	69.6	54.5	40.8	63.5

Source of data: Quedan Board

a/ do not include loans granted by savings banks.

b/ Quedan for Food/Traders Program

c/ Quedan for Farmers Group

d/ Quedan for Market Retailers Program

by the private development banks (PDBs). The rural banks (RBs) originated a minimal amount of guaranteed loans.

The above trend has been observed for all years under the GFSME and QGP programs. For the IGLF, the non-bank financial institutions (NBFIs) granted the bulk of guaranteed loans during the earlier years (1978-82). Starting in 1983, however, KBs originated most of the guaranteed loans.

The above finding is not surprising since KBs represented most of the accredited banks. KBs comprise about 50 percent of the total number of accredited institutions under GFSME, and 60 percent under IGLF. Although only 20 percent of the accredited institutions under QGP are KBs, they have, however, originated bigger loans averaging ₱1.71M compared to RBs whose loan size average only ₱20,000.

Under the GFSME and IGLF programs average loan size falls within the 1.0M - 2.0M bracket. Table 5 shows that about 90 percent of the loans granted under GFSME are within the 2.0 - 5.0M bracket mode. For the years 1985 and 1986, loans within this size category comprise about 50 percent of the amount of and 38 percent of the number of projects guaranteed. On the other hand, loans below ₱500,000 but not less than ₱200,000 comprise an average of 14.4 percent. In terms of average annual growth rates, loans of size ₱0.5 - 2.0M registered the highest growth rate; followed by loans of ₱2.0 - 5.0M.

Table 5. GUARANTEED LOANS GRANTED[a] BY LOAN SIZE, GFSME, 1984-86
(IN REAL TERMS, 1972=100)

	1984				1985				1986				Ave. Annual Growth Rates (%)	
	No.	%	Amt. (₱M)	%	No.	%	Amt. (₱M)	%	No.	%	Amt. (₱M)	%	Number	Amount (₱M)
Distribution by Loan Size														
₱0.2M – ₱0.5M	4	33.0	0.4	8.5	8	14.0	0.5	2.5	15	17.8	0.9	4.0	93.4	50.0
0.5M – 1.0M	1	8.5	0.2	2.1	6	10.5	0.6	3.0	20	23.8	2.3	10.7	347.2	389.9
1.0M – 2.0M	4	33.0	1.0	21.3	17	29.8	4.3	21.6	20	23.8	4.3	20.1	123.6	107.4
2.0M – 5.0M	2	17.0	1.8	38.3	23	40.4	11.3	56.8	27	32.1	12.6	51.2	267.4	164.6
5.0M – 8.0M	2	8.5	1.4	29.8	3	5.3	3.2	16.1	2	2.4	2.0	9.0	0	19.5
TOTAL	12	100	4.8	100	57	100	19.9	100	84	100	22.1	100	164.6	118.3

Source of data: GFSME

a/
   net of withdrawals during the year (i.e. active currents).

For the IGLF program, the bulk of the loans are within the P800,000 - 4.0 M bracket (Table 6). Moreover, it is further observed that over the years only the bracket modes greater than P500,000 showed positive average annual growth rates. That is, there has been an increase in the number of loans belonging to these size categories. On the other hand, loans below P500,000 have been decreasing in number.

Similarly, under the QGP, loans for the Farmers Group have become unpopular among banking institutions (refer to Table 4); while loans for FTP and MRP have been increasing.

The above findings suggest the preference of banks for fairly large-sized loans.

The most popular investment area for GFSME is fish and marine, in particular prawn culture (Table 7). Within GFSME's three years in operation, a total of 153 loans representing about 54 percent of total loans guaranteed were in fish and marine. Seventy (70) percent of these are in prawns. Under IGLF, manufacturing is the most popular investment area (Table 8). About 97 percent of loans granted under the program are in the industrial sector, in particular the food and food products manufacturing sub-sector. On the other hand, most loans guaranteed under the QGP were from the FTP program (refer to Table 4), comprising about 98 percent of loans granted. The program for Farmers Group (FG) is the least popular. Its share is neglible and in some years no loans were originated under the program.

Table 6.   GUARANTEED LOANS GRANTED BY LOAN SIZE, IGLF, 1978-86
(IN REAL TERMS 1972 = 100)

Size of Loan (₱)	1978		1979	
	NO.	Amount (₱M)	No.	Amount (₱M)
50,000 and below	3	-	1	-
50,001 - 200,000	42	2.4	28	1.6
200,000 - 500,000	95	19.5	118	22.5
500,001 - 800,000	-	-	-	-
800,001 - 2,500,000	-	-	-	-
2,500,001 - 4,000,000	-	-	-	-
4,000,0001- 5,000,000	-	-	-	-
TOTAL	140	21.9	147	24.2

Size of Loan (₱)	1980		1981	
	NO.	Amount (₱M)	No.	Amount (₱M)
50,000 and below	4	0.1	2	-
50,0001 - 200,000	19	0.9	27	1.2
200,001 - 500,000	72	11.5	49	6.1
500,001 - 800,000	18	4.5	46	10.8
800,001 - 2,500,000	57	34.4	98	56.0
2,500,001 - 4,000,000	-	-	-	-
4,000,001 - 5,000,000	-	-	-	-
TOTAL	170	51.4	222	74.1

Size of Loan (₱)	1982		1983	
	NO.	Amount (₱M)	No.	Amount (₱M)
50,000 and below	-	-	-	-
50,001 - 200,000	16	0.7	18	0.8
200,001 - 500,000	38	4.5	34	3.5
500,001 - 800,000	30	6.6	23	4.3
800,001 - 2,500,000	77	42.1	85	37.9
2,500,001 - 4,000,000	-	0.9	8	9.3
4,000,001 - 5,000,000	-	-		-
TOTAL	162	54.8	169	55.1

Table 7.   GUARANTEED LOANS GRANTED BY INVESTMENT AREA, GFSME, 1984-86
(IN REAL TERMS, 1972 = 100)

Investment Area	1984				1985				1986				Ave. Annual Growth Rates (%)	
	No.	%	Amt. (₱M)	%	No.	%	Amt. (₱M)	%	No.	%	Amt. (₱M)	%	Number	Amount (₱M)
1. Cereals and grains	0		0		1	-	0.4	2.0	4	4.4	0.9	4.1	-	-
2. Fruits and Nuts	0		0		4	7.0	1.4	7.0	2	2.2	1.2	5.4	-	-
3. Vegetable and crop	1	8.3	0.1	2.1	2	3.5	1.2	6.0	0	-	-	-		
4. Livestock and Poultry	5	41.7	2.2	45.8	12	21.0	2.9	14.5	19	21.1	4.1	18.6	94.9	36.5
5. Fish and Marine	3	25.0	0.9	18.8	29	50.9	10.5	52.5	45	50.0	12.9	58.4	287.3	278.6
6. Others - Food	3	25.0	1.6	33.3	7	12.3	2.9	14.5	11	12.2	2.4	10.8	91.5	22.5
7. Others Non-Food	0	-	-	-	2	3.5	0.7	3.5	3	3.3	0.6	2.7	-	-
TOTAL	12	100	4.8	100	57	100	20.0	100	90	100	22.1	100	164.6	118.3

Source of data: GFSME

- less than 2%

GUARANTEED LOANS BY INDUSTRY, IGLF, 1978-1988
(IN REAL TERMS, 1972 = 100)

Industry	1978		1979		1980		1981		1982	
	No.	Amt. (₱M)	No.	Amt. (₱M)	No.	Amt. (₱M)	No.	Amt. (₱M)	No.	Amt. (₱M)
Manufacturing	132	20.7	145	23.8	161	48.6	218	73.1	161	25.5
Construction	1	0.2	0	0	1	0.9	0	0	0	0
Tourism	3	0.4	2	0.4	3	0.9	2	0.5	0	0
Other Services	4	0.6	0	0	5	1.0	2	0.5	1	0.2
Total (all industry)	140	21.9	147	24.2	170	51.4	222	74.1	162	54.7

Industry	1983		1984		1985		1986		Ave. Annual Growth Rate (%)	
	No.	Amt. (₱M)	No.	Amt. (₱M)	No.	Amt. (₱M)	No.	Amt. (₱M)	No.	Amt. (₱M)
Manufacturing a/	165	53.0	266	81.6	395	90.1	184	32.2	4.2	5.7
Construction	1	0.8	0	0	1	0.2	0	0	–	–
Tourism	0	0	0	0	0	0	0	0	–	–
Other Services	3	1.3	7	2.6	4	0.7	3	0.3	(3.5)	(8.3)
Total (all industry)	169	55.1	273	84.2	400	91.0	187	32.5	3.7	5.0

Source of data: IGLF

- less than 2%
a/
   see Appendix III-2 for details

For the CIP, the total number of farmers insured represent only about 14 percent of the total rice farmers and about 20 percent of the corn farmers in the country. The bulk of insurance comes from the region wHere the crop is popularly or widely grown, for instance, Region III for rice crop and Region XI for corn. The number of insured farmers for both crops has been declining, however, the amount of coverage has shown positive growth rates.

In terms of repayment performance, the GFSME and QGP seem to be doing quite well, boasting a repayment rate of more than 90 percent. IGLF repayment performance is not as impressive as GFSME and QGP as repayment rates average only about 50 percent.

The success of the guarantee programs depends to a certain extent on the ability of the implementing agencies to sustain their financial viability and credibility. The costs incurred in operating the schemes give some indications of their overall performance. Among the guarantee programs, the IGLF has the least cost per peso incurred which amounted to ₱0.019 (Table 9 - 11), followed by CIP (₱0.050). GFSME has the highest average cost per peso (₱0.11). Despite this, however, GFSME registered the highest income among the three programs. This is due to the good repayment rates of GFSME compared to IGLF. CIP's income on the other hand, was "eaten up" by the huge amount of indemnities. Starting in 1983, the program has been paying, on average, more than 63 percent of the premium earned. Hence, even income from its investments in government securities has been utilized to cover cost.

Table 9.   GFSME COST OF DOING BUSINESS, 1984-86
(IN REAL TERMS, 1972 = 100)

	1984	1985	1986	Average Annual Growth Rate (%)
1. Administrative Cost (₱M)	0.7	1.5	2.4	85.2
2. Projects Financed				
a. Number	12	57	94	179.9
b. Amount (₱M)	4.8	20.0	22.3	118.3
3. Cost/Loan				
Cost/Project (1÷2a) ₱	58,333	26,316	25,531	(33.8)
Cost/Peso (1÷2b) ₱	0.14	0.08	0.11	(11.4)
4. Guarantee and Participation Fee	36,149	738,116	280,208	178.4

Source of basic data: IGLF

Table 10. IGLF COST OF DOING BUSINESS, 1978-86
(IN REAL TERMS, 1972 = 100)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	Average Annual Growth Rate (%)
1. IGLF Administrative Cost (₱M)	0.6	0.7	0.8	1.0	1.1	1.2	0.9	0.9	0.8	3.6
2. Projects Financed										
a. Number	140	147	170	222	162	169	273	400	187	3.7
b. Amount (₱M)	21.9	24.2	51.4	74.1	54.8	55.1	84.2	90.9	105.0	21.6
3. Cost/Loan										
Cost/Project (1÷2a)	4,286	4,762	4,706	4,504	6,790	7,100	3,297	2,250	4,278	(0.02)
Cost/Peso (1÷2b)	0.027	0.029	0.016	0.013	0.020	0.022	0.011	0.010	0.025	(1.0)

Source of basic data: IGLF

Table 11. CIP COST OF DOING BUSINESSES, 1981-86
(IN REAL TERMS, 1987 = 100)

	1981	1982	1983	1984	1985	1986	Average Annual Growth Rate (%)
1. Administrative cost	4.3	7.8	8.3	6.6	6.5	6.2	7.6
2. Policies issued (total) a/							
a. Amount (₱ million)	84.0	129.9	158.0	112.8	172.4	151.0	12.4
b. Number of farmers	108,528	180,583	220,633	156,417	186,161	141,868	12.4
c. Number of hectares	199,333	322,916	387,527	259,030	337,976	271,137	5.5
3. Cost/Loan							
Cost/peso (1 ÷ 2a) ₱	0.05	0.06	0.05	0.06	0.04	0.04	(4.4)
Cost/farmer (1 ÷ 2b)	39.60	43.20	37.62	42.20	34.90	43.70	2.0
Cost/hectares (1 ÷ 2c)	21.60	24.20	21.42	25.50	19.23	22.90	1.2
4. Ratio of claims to premium earned	0.25	0.83	1.56	1.84	1.51	1.71	46.9
5. Loss ratio	0.71	1.66	2.32	2.66	2.04	2.28	26.3

a/ both borrowing and self-financed farmers.

V. IMPACT OF GUARANTEE PROGRAMS ON SUPPLY OF CREDIT

This section examines some indicators to determine the probable effect of the guarantee programs on the supply of credit to the socially desirable sector, in this case, agriculture.

In absolute terms, agricultural loans granted by banking institutions showed a positive average annual growth rate for the years 1981-86 (see CB Statistical Bulletin 1986). However, the ratio of agricultural loans to total loans of banking institutions has shown negative growth rates (Table 12). This finding indicates that despite the increase in the loan portfolio of banks, agricultural loans seems to be of least priority to them. Surprisingly, this occurred even though the volume of guaranteed loans was observed to be increasing in real terms as earlier mentioned. Of the total agricultural loans granted by banking institutions, guaranteed loans represented only an average share of 2.8 percent (Table 13). This share is, however, increasing. Among banks, PDBs have the largest share of guaranteed loans in their loan portfolio. RBs rank next followed by KBs.

The increase in the amount of guaranteed loans suggests a positive attitude of banks towards guarantee programs. However, this increase vis-à-vis a declining share of agricultural loans to the total loan portfolio of banking institutions indicates that there is no net addition to loan granted to the agricultural sector. A substitution must have occurred. In this case government funds are substituted for banks' funds.

Table 12. PROPORTION OF AGRICULTURAL LOANS TO TOTAL LOANS,
SELECTED BANKING INSTITUTIONS, 1981-86 (IN PERCENT)

Type of Institution	1981	1982	1983	1984	1985	1986	Ave. Annual Growth Rate (%)	Ave. Proportion 1981-86
KBs	7.7	6.3	6.8	7.3	9.0	6.6	(3.0)	7.3
PDBs	19.2	19.8	8.5	15.3	12.0	13.8	(6.4)	15.1
RBs	85.0	82.8	80.6	75.9	71.4	66.0	(4.9)	80.1
Total a/ (All Banks)	9.1	8.2	8.0	8.1	12.1	7.9	(2.3)	8.9

Source of data: TBAC-ACS Study
CB Statistical Bulletin

a/
includes SGBs, Savings Banks, SSLAS

Table 13. RATIO OF AGRICULTURAL GUARANTEED LOANS TO
AGRICULTURAL LOANS GRANTED, SELECTED FINANCIAL
INSTITUTIONS, 1981-86 (IN PERCENT)

Financial Institution	1981	1982	1983	1984	1985	1986	Ave. Annual Growth Rate (%)	Ave. Ratio 1981-86
KBs	1.0	1.4	2.1	1.5	2.4	4.2	(33.2)	2.1
PDBs	42.2	77.8	12.0	59.8	58.4	25.8	(0.9)	46.0
RBs	1.0	2.0	1.2	1.8	2.6	3.8	16.1	2.2
Total (All Banks)	1.7	2.7	2.1	2.2	3.1	5.0	24.1	2.8

Source of data: GFSME, QGFB, CB

Unfortunately, there is no information on agricultural loans granted by banking institutions from their own funds or agricultural loans rediscounted, to determine whether banks have been using the guarantee programs as a "liquidity window".

Comparing agricultural loans granted with the deposits generated by banking institutions might give a rough idea on the extent of utilization of bank funds. Table 14 reveals that the share of agricultural loans to deposits of banking institutions has been declining, from 26.0 percent in 1981, to 13.9 percent in 1986, or an annual average decrease of 12.0 percent. This happened despite the increase in real deposits. Real deposits showed an average annual growth rate of 29.3 percent for a 6-year period, 1981-86 (see CB Statistical Bulletin 1987). Among banks, the ratio of agricultural loans to deposits also showed negative annual growth rates. Only PDBs showed a positive average annual growth rate (3.5%) but this is minimal compared to the 43.4 percent increase in real deposit for the same period.

The share of agricultural loans to deposit average only 20.7 percent. Among banks, rural banks allocate the highest proportion of deposits to agricultural loans (113%) while KBs and PDBs allocate only 20 percent.

The only available data so far that would directly determine the amount of agricultural loans rediscounted is from the Comparative Bank Survey (Table 15). The table reveals that of the total guaranteed loans granted by participating banks for all the guarantee programs in 1986, 97.3 percent have been

Table 14.   PROPORTION OF AGRICULTURAL LOANS TO DEPOSITS,
            BANKING INSTITUTIONS, 1981-86 (IN PERCENT)

Banking Institution	1981	1982	1983	1984	1985	1986	Ave. Ratio 1981-1986	Ave. Annual Growth Rate (%)
KBs	23.9	22.4	19.3	17.6	16.7	12.9	18.8	(11.6)
PDBs	23.5	20.3	14.2	15.1	12.7	27.9	19.0	3.5
RBs	153.5	143.7	128.4	101.2	92.0	59.4	113.0	(17.3)
Total a/	26.0	24.7	21.9	20.8	16.9	13.9	20.7	(12.0)

Source of data: TBAC-ACS Study
                  CB Statistical Bulletin

a/
  includes SGBs, Savings Banks, SSLAS

Table 15. LOANS GRANTED BY LOAN PROGRAM[a] BY GUARANTEE AND BY
BANKING INSTITUTION, PARTICIPATING BANKS, 1986
(IN MILLION PESOS)

Program	Straight Guarantee								Rediscounted								Both Programs							
	KB	%	PDBs	%	RBs	%	All Banks	%	KB	%	PDBs	%	RBs	%	All Banks	%	KBs	%	PDBs	%	RBs	%	All Banks	%
IGLF	0	0	0						9.6	20.2	3.8	7.9	0		13.4	28.1	9.6	20.2	3.8	7.9	0		13.4	26.1
GFSME	0	0	0						0	0	0		0				0		0		0	0		
QGF	0	0.3	0.6	0			0.3	0.6	11.2	23.5	21.0	44.1	0		32.2	67.6	11.2	23.5	21.3	44.7	0		32.50	68.2
CIP	0	0	-	0.99	2.0	0.99	2.0		0		0.8	1.6	0	0.0	1.6		0		0.0	1.6	0.99	2.0	1.8	3.7
TOTAL	0	0.3	0.6	0.99	2.0	1.2	2.5		20.8	43.7	25.6	53.6	0	46.3	97.3		20.8	43.7	25.8	54.2	0.99	2.0	47.7	100

Source of data: Comparative Bank Study Survey, 1987

a/
   include combination program but was not included in the table because no bank in the sample availed of the program.

rediscounted. Only 2.5 percent utilized funds from the banking institutions.

VI. BANK ASSESSMENT OF AND EXPERIENCE WITH GUARANTEE PROGRAMS

Data from the Comparative Bank Study Survey 1987 (see Lamberte 1988 and Magno 1988 for details on the study), revealed that only a few banks or branches participate in guarantee programs. In particular, only 17 (31.5%) of the 54 banks interviewed have participated in the program. The most common reason given by respondents, especially KBs and PDBs, for not participating is that there are no borrowers/ applicants in their service area. For RBs, the most common reason given for non-participation is that they were not being accredited.

For the participating banks, various problems have been cited. The most common problem cited is the longer time spent in servicing guaranteed loans due to cumbersome and voluminous requirements. Table 16 shows that more man-hours are used in servicing a guaranteed loan than a regular loan. The GFSME revealed the highest man-hour difference among guaranteed programs in servicing a guaranteed loan, an average of 308.3 percent. The least man-hours of difference is observed in the CIP with an average of 20 percent.

The greater man-hours needed to service a guaranteed loan is mainly attributed to the screening, loan processing and loan · monitoring activities. For instance, under IGLF, screening of guaranteed loans takes 93.6 percent more man-hours than a regular

Table 16. AVERAGE DIFFERENCE IN MAN-HOURS SPENT ON GUARANTEED LOANS
AGAINST REGULAR LOANS, BY PROGRAM AND BY LENDING ACTIVITY,
SELECTED BANKING INSTITUTIONS, 17 BANKS (IN PERCENT PER ANNUM)

Program/Activity	Banking Institution				
	KBs	PDBs	RBs	All Banks	Pr [b/] (t-test)
IGLF					
No. of Respondents	3	8		11	
Screening	143.3	75.0	a/	93.6	0.40
Processing	76.7	65.6		68.6	0.90
Credit Investigation	62.5	3.6		33.4	0.01
Loan Monitoring	20.0	99.4		77.7	0.60
Total (all activities)	302.5	243.6		278.3	
GFSME					
No. of Respondents	3	5		8	
Screening	176.7	40.0	a/	91.2	0.10
Processing	76.7	105.0		94.4	0.70
Credit Investigation	33.3	15.0		21.9	0.40
Loan Monitoring	20.0	150.0		101.2	0.60
Total (all activities)	306.7	310.0		308.7	
QGP					
No. of Respondents	4	8		12	
Screening	176.7	31.2	a/	70.9	0.02
Processing	62.5	21.9		35.4	0.10
Credit Investigation	37.5	3.1		14.6	0.10
Loan Monitoring	17.5	0		5.8	0.30
Total (all activities)	294.2	56.2		126.7	
CIP					
No. of Respondents		1	3	4	
Screening		0	-3.3	-2.5	0.60
Processing	a/	0	10.0	7.5	0.90
Credit Investigation		0	6.7	5.0	1.20
Loan Monitoring		0	13.3	10.0	1.00
Total (all activities)		1	30.0	20.0	

Analysis of Variance (ANOVA)

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F-RATIO	PROB
Activity	13655.137	3	4551.712	9.552	3.700E-03
Program	4054.557	3	1351.519	2.836	0.0983
Error	4288.466	9	476.496		
Total	21998.159	15			

Source of data: Comparative Bank Study Survey, 1987.

a/ no participants

b/ test of difference among means

c/ test of difference among means (all banks)

loan, 68.6 percent more in loan processing and 77.7 percent more in loan monitoring. Under GFSME, screening takes 91.2 percent more man-hours, 94.4 percent for loan processing and 101.2 percent for loan monitoring. These time differences among activities are statistically significant at a 5 percent level of significance.

Between KBs and PDBs, no statistical significant differences among activities were obtained except in credit investigation of IGLF loans and in screening of QGP loan. In both cases, KBs spend more time than PDBs.

In general, more man-hours are spent in servicing a guaranteed loan, in particular screening, loan processing and monitoring activities, due to the following reasons: First, the numerous requirements and paperwork needed. For instance, feasibility studies, project plans, audited financial statements etc. Second, banks are mandated by the Central Bank or the Guarantee Board to closely supervise guaranteed loans due to a greater possibility of credit being diverted to other uses. Third, banks want to be certain that the loans accepted for guarantee will be approved by the Guarantee Board. Hence, they have to abide by the rules and regulations of the Board. And lastly, banks want to make sure that borrowers will not default on loans because if this happens, they will be blacklisted by the concerned government agencies, not to mention the potential financial losses. Hence, banks have to be meticulous in approving guaranteed loans.

Despite the problems encountered by the banks, participation in the programs is still desirable. The benefit most commonly cited by banks is that guarantee programs portray an image of stability to the bank. This is because accredited banks are chosen by the guarantee institutions based on certain rigorous banking criteria. For instance, the accredited bank should have no arrearages with the Central Bank and that the arrearages on total loans outstanding should not be greater than 10 percent. Moreover, the bank should have no deficiencies in reserves on deposit liabilities and should have a sound and efficient management. Given these criteria, the public may perceive that an accredited bank must be a good bank.

VII. A CASE STUDY ON GFSME

This section further discusses the response by lending institutions to the guarantee programs. Here we specifically analyse the factors that affect the decision of financial institutions whether to keep their own funds tied up in the loan (referred to as warehouse) or to liquify their guaranteed loans.

The only available data on which to conduct this analysis is from GFSME; hence, the choice of the program. The data consist of the characteristics of loans guaranteed by GFSME since the start of the program (i.e., February 1984) to March 1988. Among others are: (1) the status of the loan; (2) the type of business; (3) the location of business; (4) the originating bank; (5) interest rate; and (6) loan size. These variables were the major categories of the observations.

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The estimating equation is expressed as:

WAREL   = f(FISH, LIVESTOCK, PDB, OBANK, LUZON, VISAYAS,
             interest, loan size, default)

where,   WAREL   a dummy variable on the banks' decision to warehouse a guaranteed loan where WAREL = 1 if the loan is warehoused and 0 otherwise. WAREL = 0 means that banks' funds are not tied up to the loan. That is, the loan could either be sold to GFSME, prepaid and withdrawn by the borrowers or pending for approval.

FISH and LIVESTOCK =   are dummy variables on type of business where FISH = 1 if the loan is invested on fish and marine and 0 otherwise.
LIVESTOCK = 1 if loan is on livestock and poultry and 0 otherwise.

PDB and OBANKS = are dummy variables on bank type of where PDB = 1 if a private development bank (PDBs) and 0 otherwise. OBANKS = 1 if any financial institutions other than KBs.

LUZON and VISAYAS = are dummy variables on location of business where LUZON = 1 if the business is located in Luzon and 0 otherwise. VISAYAS = 1 if the business is located in Visayas, and otherwise.

Interest = nominal annual interest rate on loans. This variable is actually a proxy for loan maturity since interest rates vary not across loans but across time.

Loan size = categorization variable where

1	$\leq$	₱500,000
2	=	500,001 - 1.0M
3	=	1.01M - 2.0M
4	=	2.01M - 5.0M
5	$\leq$	5.01M - 8.0M

default = dummy variable on default where def = 1 if loan defaulted, 0 otherwise.

A logit model was used to estimate this equation and Table 17 presents the results.

The type of business is not significant in the model. This implies that banks do not use this factor in deciding to warehouse or not to warehouse the loan papers.

The variable on bank type showed negative coefficients for both PDBs and OBANK though only the coefficient on PDBs is significant. The negative coefficients suggest that financial institutions except KBs, do not tie up their funds in guaranteed loans. This finding supports the earlier contention that banks consider guarantee programs as a liquidity window. This appears to be the case with PDBs and RBs. In another test of the model, using KBs instead of PDBs, the coefficient for KBs was positive and statistically significant (see Table 18). This means that only KBs, among banks prefer to warehouse guaranteed loans. There could be various reasons for this. One possible reason is that KBs have more loanable funds than other financial

Tab Table 17.   ESTIMATES OF FACTORS AFFECTING FINANCIAL INSTITUTIONS'
DECISION TO WAREHOUSE A GUARANTEED LOAN (MODEL 1)

Variable	Coefficient	Std. Error	Prob.
Constant	9.11394	2.34904	0.000
FISH	0.18638	0.41803	0.656
LIVESTOCK	0.22327	0.43108	0.605
PDBs	-0.14917	0.33616	0.001*
OBANKS	-0.81191	0.55256	0.142
LUZON	1.09485	0.53876	0.042**
VISAYAS	1.56464	0.57854	0.007*
Interest	-0.56449	0.14365	0.000*
Loan size	-0.21717	0.12744	0.088***
Default	-2.34975	0.94175	0.013**

Log Likelihood ratio = 152.003*

Number of observations   285

 Cases with WAREL = 1   158

 Cases with WAREL = 0   127

Source of data: Magno, M. (1985). An Analysis of the Risk-
    Reducing Programs in the Philippines. M.A. Thesis.
    U.P. School of Economics. 1988.

    * Significant at 1%
   ** Significant at 5%
  *** Significant at 10%

Table 18. ESTIMATES OF FACTORS AFFECTING FINANCIAL INSTITUTIONS'
DECISION TO WAREHOUSE A GUARANTEED LOAN (MODEL 2)

Variable	Coefficient	Std. Error	Prob
C	9.61490	2.32198	0.000
FISH	0.22879	0.41741	0.584
LIVESTOCK	0.23477	0.43196	0.587
KBs	1.14917	0.33616	0.004*
PDBs	-0.35202	0.53870	0.513
LUZON	-0.37078	0.36762	0.313
MINDANAO	-1.40362	0.58890	0.017**
INTEREST	-0.55406	0.14324	0.000*
LOANSIZE	-0.22357	0.12734	0.079***
DEFAULT	-2.36582	0.94224	0.012**

Log Likelihood ratio = 152.87*
No. of Samples = 285
    Cases with WAREL=1   158
    Cases with WAREL=0   127

   * significant at 1%
  ** significant at 5%
 *** significant at 10%

institutions. Another is that for KBs, a guaranteed loan is no different from a regular loan which means that all borrowers are evaluated as if there was no guarantee. This implies that the borrowers under the guarantee program are the same borrowers the bank could have lend to even without the guarantee.

The location of the business is also a significant factor affecting the decision to warehouse a guaranteed loan. The positive coefficients indicates that financial institutions prefer to warehouse loans originating from either Luzon or Visayas. In contrast, the coefficient for Mindanao was negative and significant (see Table 18). This finding implies that banks prefer not to warehouse loans ested in Mindanao. One probable

explanation for this is the peace and order conditions and the "political instability" in the area.

The other significant factors which affect financial institutions' decision to warehouse a loan are interest rates, loan size and default conditions. All these variables showed negative coefficients suggesting that banks prefer to warehouse small size loans and loans with low interest rates that is, loans with short-term maturity. Similarly, they prefer to warehouse loans which are unlikely to default. These findings seem to indicate that banks warehouse less risky loans.

VIII. CONCLUSIONS

The performance of the credit guarantee programs to date has suggested that the schemes have not significantly improved the amount of credit to agriculture. At the very least, the schemes succeeded in encouraging banks to participate in the program, as shown by the increase in the proportion of guaranteed loans to the agricultural loans of banking institutions, in particular, for commercial banks. However, even this participation of banks is questionable. There are certain indications that banks have seen these programs largely as a source of additional loanable funds rather than as a risk-reducing mechanism for loans made from own funds. This implies that, so far, the program has not succeeded in encouraging banks to lend their own funds to the priority sectors of the government, in particular to agriculture. Moreover, the greater time spent in servicing a

guaranteed loan than a non-guaranteed loan implies that the program did not effectively reduce the cost of lending.

Finally, it is doubtful whether the program can cater to small borrowers or industries. Results show that banks, in particular KBs, favor large-sized loans. Only the CIP among the guarantee programs is able to serve the small borrowers. GFSME, IGLF and QGP seems to have been designed for the fairly large borrower.

IX. POLICY IMPLICATIONS

Credit guarantee programs can only be an effective form of support to agriculture and indigenous industries if the following conditions are met: (1) banks as well as borrowers are willing to participate in the schemes; (2) banks use their own funds for on-lending; (3) the extent of bank participation is not limited to satisfying the requirements of the program or boosting their viability; (4) the program is able to cater to their targetted clientele; and (5) guarantee programs can have enough income to cover their costs. The study, however, demonstrates that so far, the above conditions have generally not been met. This raises doubts as to the effectiveness of the programs or the appropriateness of their design and implementation. Some issues which needs to be considered are: First, it appears that the guarantee programs, like the previous special credit programs, have entailed much administrative work which served as one major drawback. It should be noted that there is a trade-off between risk and administrative cost. If the

increase in administrative cost is higher than the decrease in risk costs, then the effectiveness of the guarantee programs is reduced and its attractiveness to lender is diminished. Guarantee programs will only be successful in inducing banks to voluntarily increase their exposure to lending if the overall cost declines. This means that the government should be concerned not only with reducing bank risks but also administrative costs, and in particular information costs.

In addition, it is doubtful whether banks will be enthusiastic in participating in programs that increase their transaction costs. For lenders, it is unlikely that they would exert much effort in evaluating loan applicants carefully or have a different criteria for lending to borrowers under the guarantee program. Most likely they will still evaluate all borrowers as if there was no guarantee. This implies that the borrowers accepted under the guarantee program are possibly the same borrowers to which they would have lent to anyway even without the guarantee. Therefore, enhancing borrowers' credit worthiness should also be taken into consideration rather than simply reducing lender's risk of non-repayment. Lenders can device various ways to take care of risk and collateral is one of them. Banks can simply adjust collateral requirements to take care of differences in the riskiness of investments.

On the borrowers side, it is also unlikely that they will be willing to participate in programs with high transaction costs. If they want to participate, they are most likely the high risk borrowers to which banks would not lend to anyway.

A second consideration is the issue on accreditation. There seems to be a conflict with the criteria for accrediting banks and the guarantee program's aim to cater to small borrowers or rural-based industries. Accreditation criteria particularly on arrearages are rigorous such that only commercial banks are most likely to meet them. It is generally known that commercial banks are more familiar with the large urban-based industries. In contrast, rural banks are generally more familiar with agriculture and rural-based industries, yet they are least likely to be accredited. It is not surprising therefore, that most loans under the guarantee programs are fairly large-sized loans since most of the accredited banks are commercial banks. Except for the Crop Insurance Program, only a few rural banks, are accredited. Hence, for credit programs to really cater to cottage and small industries as well as the poorest and smallest farmers, rural banks should be tapped as the main conduits of the program. And for this, the rehabilitation of rural banks becomes absolutely essential.

On the other hand, the accreditation of most commercial banks is in line with the guarantee scheme's "learning" objective, which is for banks, in particular KBs, to become acquainted with lending to the priority sectors with the expectation that they would be more inclined to make loans even

without the guarantee. But this can only succeed if banks would consider the guarantee schemes as risk-reducing mechanisms and not a liquidity mechanism. This means that banks should consider the "guarantee" as an "add-on" to the borrowers credit worthiness.

A third issue arising from the credit guarantee schemes is the question of sustaining the viability of the guarantee programs. The details of the scheme, i.e, the level of guarantee fee and risk-sharing should be designed with the intention that fees and other income will cover all costs arising from both the administration of the schemes and claims. For instance, the guarantee fee should appropriately reflect the risk involved in financing different investments. A fee lower than the "true risk" will jeopardize the viability of the fund, since claims and administrative cost would exceed the available funds. Further, it would also cause delay in payment of claims which would undermine the credibility of the guarantee institutions. On the other hand, high fees will likely limit the participation of both banks and borrowers.

Finally, the generally negative results of this analysis should not be surprising. Policymakers in many countries frequently seize on the idea of credit crop guarantee and insurance schemes to stimulate the expansion of agricultural lending. Yet the analysis of the experience of many countries suggests that guarantee program contribute little to additionality in lending (Biggs 1986, Levitsky 1987) and crop

insurance program are generally not self-supporting and require large amounts of subsidy (Hazell et al. 1986). The experience of these countries suggest that governments may have other objectives in mind besides the narrower economic areas implied here. In some cases, they may have wanted to increase bank earnings. In other cases, they may have wanted to provide welfare and to borrowers in time of distress or with permanent income transfer to them. The question that must be asked is if these guarantee and insurance programs are the most cost-effective way of achieving these goals.

These results demonstrate the difficulty of effectively "pushing" credit to priority sectors. Rather than spending so many resources over the years in interest subsidies, rediscounting schemes and now guarantee schemes, one wonders if more wouldn't have been accomplished if the same resources would have been spent on removing the obstacles that discourage the lenders from serving this clientele, such as the lack of information about expected commodity prices, poor or non-existent information about the indebtedness and post repayment record of prospective borrowers, underdeveloped markets for farm inputs and output.

REFERENCES

Akerloff, George A. "The Market" for 'Lemons': Quality, Uncertainty and the Market Mechanism." Quarterly Journal of Economics Vol. 84 (August 1970): 487-500.

Bhatt, V. V. "Interest Rate, Transaction Costs and Financial Innovations." Savings and Development Journal No. 2 (1979).

Biggs, T., et al. "The Small Business Policy Direction Study." Discussion Paper, Ministry of Trade and Industry and the Center for Research and Communication, 1986.

Blanco, Rhenee and Richard Meyer. "Rural Deposit Mobilization in the Philippines, 1977-1986," PIDS Working Paper Series No. 88-15. Manila: Philippine Institute for Development Studies, 1988.

Guarantee Fund for Small and Medium Industries. Annual Reports, 1984-1986.

Gonzalez-Vega, Claudio. "On the Iron Law Interest Rate Restrictions Agricultural Credit Policies in Costa Rica and in other Less-Developed Countries." Ph.D. dissertation, Stanford University, 1976.

_____. "Strengthening Agricultural Banking and Credit Systems in Latin America and the Carribbean." Economic Occasional Paper No. 1256, April 1986.

Hazell, Peter, et al. (ed.). Crop Insurance for Agricultural Development: Issues and Experience. Maryland: John Hopkins University Press, Baltimore, 1986.

Industrial Guarantee and Loan Fund. Performance Reports, Central Bank of the Philippines, 1978-86.

Johnson, O.E. "Credit Controls as Instruments of Development Policy in the Light of Economic Theory." Journal of Money, Credit and Banking 6, 1 (February 1974).

Khatkhate, D.R. and D.P. Villanueva. "Operations of Selective Credit Policies in Least-Developing Countries: Certain Critical Issues." World Development 6 (July-August 1978).

Lamberte, Mario B. "Description of the Data Base on the Comparative Bank Study Survey." Working-Paper, Philippine Institute for Development Studies, 1988.

Levitsky, Jacob and Ranga Prasad. "Credit Guarantee Schemes for Small and Medium Enterprises." World Bank Technical Paper No. 58, 1987.

Lipton, Michael. "Agricultural Risk, Rural Credit and the Inefficiency of Inequality." Risk, Uncertainty and Agricultural Development. The Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) and the Agricultural Development Council (ADC), 1979.

Magno, Marife. "An Analysis of the Risk-reducing Programs in the Philippines." Unpublished M.A. thesis, University of the Philippines' School of Economics , September 1988.

Masson, R. "The Creation of Risk Aversion by Imperfect Capital Markets." American Economic Review. Vol. 63 no. 1 (March 1972).

Pauly, M. "The Economic of Moral Hazard: Comments." American Economic Review, June 1968.

Pfeffer, Irving (1956). Insurance and Economic Theory. Richard Irving Incorporated, Homeward Illinois, 1956.

Philippine Crop Insurance Corporation. Annual Reports, 1980-86.

Pischke, D. Von. Crop Insurance for Agricultural Development: Issues and Experience. Edited by Peter Hazel, et al. Maryland: John Hopkins University Press, Baltimore, 1986.

Quedan Guarantee and Fund Board. Circulars and Memoranda, 1979-1987.

Ray, Edward John. "The Role of Finance in Rural Development." In Adams, Dale, Douglas Graham and D. Von Pischke, eds., Undermining Rural Development with Cheap Credit. Boulder Westview Press, 1984.

Roummasset, James. "The Case Against Crop Insurance in Developing Countries." Philippine Review of Business and Economics Vol. 15 (March 1978).

Saito, Katherine and D.P. Villanueva. "Transaction Costs of Credit to the Small Scale Sector in the Philippines." Journal of Economic Development and Cultural Change Vol. 29 (1981).

Segura, Teodora. "The Agricultural Loans Guarantee Policy." TBAC Discussion Paper No. 10, 1976.

Stockhausen, Janchim Von. "Scope and Limitation of Credit Guarantee Schemes for Small Farmer Development." World Bank Paper, September 1987.

Technical Board for Agricultural Credit (TBAC). _Agricultura_
Credit Study, Manila: TBAC. 1985.

_____. "Small Farm Indebtedness Survey." _Nationa_
Report Vol. 1, TBAC, June 1986.

Tolentino, Bruce. "Current Imperatives and Developments i
Philippine Agriculture Credit Policy." _Occassional Pape_
_No. 1324._ Department of Agricultural Economics and Rura
Sociology, Ohio State University, March 1987.

Yoon, Je Cho. "Efficiency of Capital Allocation Unde
Uncertainty: Debt Financing vs. Equity Financing." Ph.[
dissertation, Stanford University, October 1983.

_____. "Inefficiencies from Financial Liberalizatic
in the Absence of Well-Functioning Equity Markets.
Journal of Money, Credit and Banking Vol. 18 No. 2 (Ma
1986).

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