

**FUNDS TRANSFER OPERATIONS:  
BOON OR BANE TO THE VIABILITY OF  
RURAL FINANCIAL INTERMEDIARIES**

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**FUNDS TRANSFER OPERATIONS: BOON OR BANE  
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by

**Julius P. Relampagos and Mario B. Lamberte\*\***

**I. INTRODUCTION**

Financial intermediaries are supposed to have two arms. One arm is used to raise funds from surplus units, and the other, to allocate funds to credit-worthy and more productive borrowers. In the Philippines, past financial policies had largely contributed to the creation of incomplete or "one-arm" rural financial inter-

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mediaries (RFIs).<sup>1/</sup> In particular, the subsidized credit programs of the government made it very profitable for RFIs to function merely as conduits of government funds. The failure of these credit programs are well-documented.<sup>2/</sup> Their main side-effect is that they retarded the development of the savings mobilization function of RFIs.

With the recent withdrawal of subsidized credit programs and the switch in policy towards greater reliance on market forces, the availability of formal credit to the rural, agricultural sector has been greatly reduced.<sup>3/</sup> RFIs are then expected to mobilize more savings to fill in at least the void left behind by the withdrawal of such subsidized funds. This approach recognizes the fact that savings can be mobilized even in low-income communities.<sup>4/</sup> The objective of this new set of policies is to encourage the emergence of a truly viable RFIs with fully developed savings mobilization and lending functions. Only viable RFIs can genuinely contribute to a sustained increase in the flow of credit to the rural areas.

Savings mobilization appears to be a not so difficult task of RFIs. With a liberal interest rate policy, a remarkable rise

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<sup>1/</sup> RFIs include rural-based branches of commercial banks, private development banks and unit banks.

<sup>2/</sup> For example, see Sacay et al (1988).

<sup>3/</sup> See Tolentino (1987).

<sup>4/</sup> See Lamberte and Bunda (1988).

in rural deposits has been noted.<sup>5/</sup> However, this has not been matched by a rise in credit to rural areas. As noted by Lamberte (1987), branches of commercial banks and private development banks have transferred most of the funds mobilized in rural areas to their respective head offices located in Metro Manila. Thus, we are left again with incomplete RFIs, only this time, their lending function is not well-developed.<sup>6/</sup> This outcome clearly undermines one of the objectives of pushing formal financial institutions into rural areas.

So far, the policy response of the government in reversing the flow of loanable funds in favor of the rural areas is to maintain the agricultural loan quota and deposit retention policies.<sup>7/</sup> However, these schemes directly run counter to the policy of creating truly viable RFIs. There is, therefore, a need to rethink the entire approach to developing truly viable RFIs. As a first step, the behavior of banks must be well understood. In this particular case, there is a need to study the funds transfer operations of bank branches.

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<sup>5/</sup>

See Blanco and Meyer (1988).

<sup>6/</sup>

The reasons why RFIs prefer not to lend to rural areas are discussed in Lapar and Graham (1988), Magno and Meyer (1988), and Untalan and Cuevas (1988).

<sup>7/</sup>

The former stipulates that banks allocate 10 percent of their net loanable funds to agrarian reform beneficiaries and 15 percent, for general agricultural lending while the latter requires banks to invest 75 percent of their total deposits in the same service area. (See Lamberte and Lim [1987] for more details).

The specific questions this paper aims to answer are:

- (1) What is the structure of funds transfer operations of rural-based branches of banks? Is it from one branch to another? Or is it from one branch to the head office?
- (2) What factors determine the volume of funds transferred from one branch to another of the same bank?
- (3) What is the impact of funds transfer operations on the savings mobilization efforts of rural-based financial intermediaries?

The next section discusses some theoretical considerations regarding funds transfer operations and savings mobilization. Section III presents some empirical results which draw heavily on Relampagos (1988). Some policy implications are discussed in the last section.

## II. FUNDS TRANSFER OPERATIONS AND SAVINGS MOBILIZATION: SOME THEORETICAL CONSIDERATIONS

In the rural areas, the seasonality of economic activity is clearly visible. It is important to recognize this feature since it implies a certain pattern in the flow of resources. For example, in predominantly rice-producing areas, demand for working capital by farm-households sharply rises during planting season, while excess funds are being accumulated during harvest



<sup>8/</sup> season. In the absence of formal financial institutions in the rural areas, farmers source credit from the ICMs during planting season. At harvest season, they pay their debts. Whatever is left after provision for home consumption is kept either in cash or in physical assets (e.g. radios, camera, etc.) which can be sold or mortgaged when planting season comes to augment their working capital. Although these forms of savings yield low returns, still farmers hang on to them because of the absence of more attractive savings instruments.<sup>9/</sup>

Any bank that operates in the rural areas has to squarely deal with the seasonality of economic activity. The implication of this seasonality on the flow of funds of a particular bank situated in a town is depicted in Figure 1. Although there are other economic activities in this town, it is assumed that one agricultural economic activity, say rice farming, dominates. Of course, this is not an unrealistic assumption as one scans the rural landscape of the country. It is further assumed that there are two planting and harvest seasons per year. Inevitably, the pattern of the demand for credit experienced by the bank in this town follows that of the dominant economic activity.<sup>10/</sup>

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<sup>8/</sup>

For empirical support, see TBAC (1981).

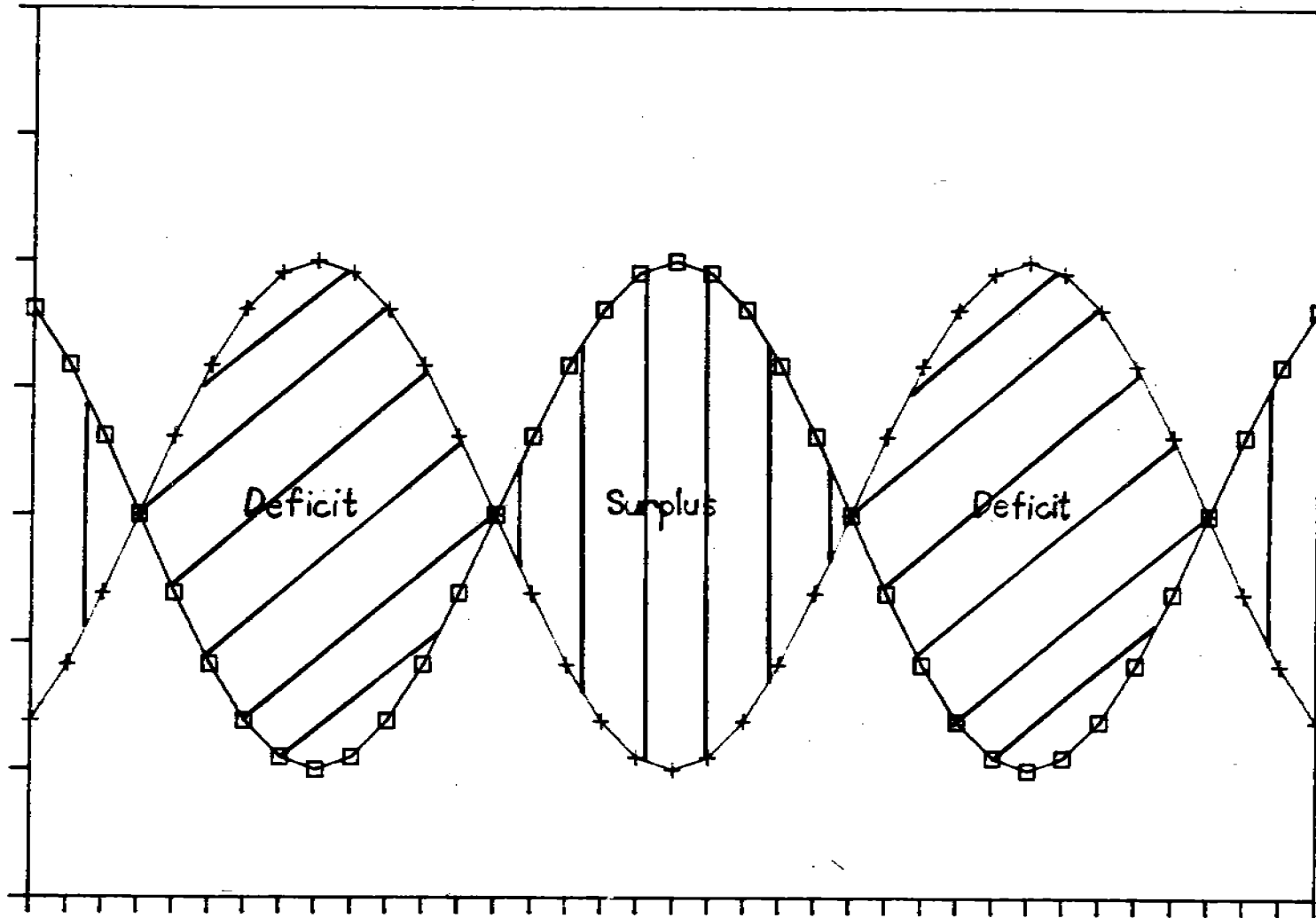
<sup>9/</sup>

In the case of cash, any positive inflation rate yields negative return. In the case of physical assets, the cost involved in liquifying them could be high.

<sup>10/</sup>

Note that the demand for credit here refers only to those of credit-worthy borrowers as perceived by the bank. For a discussion on the stages in determining credit-worthy borrowers, see Lapar and Graham (1988).

Figure 1: Temporary Liquidity Problem



□ Deposits

+ Viable Loan Demand

The presence of a bank in a town provides savers with an alternative form of saving. It is assumed here that the characteristics of these savings instruments (i.e. yield, risk, liquidity, etc.) are better than cash or physical assets. Although the savings pattern of households/individuals in a particular town may be heterogeneous,<sup>11/</sup> the existence of a dominant economic activity implies an aggregate pattern of saving dominated by those who are engaged in the dominant economic activity. This is also shown in Figure 1.

During planting season, the bank is likely to experience heavy withdrawals of deposits, while during harvest season, a surge in deposits. In both situations, a bank is confronted with a liquidity problem; that is, it is highly illiquid during planting season and too liquid during harvest season. Since its loanable funds are low during planting season, the bank cannot meet all the demand for credit, thereby foregoing profitable earning opportunities. Any increase in the interest rate will likely have very minimal impact on deposits since the dominant savers are withdrawing their deposits this period. On the other hand, during harvest season where demand for credit is very low, the bank will find itself holding costly idle balances. Thus, the entire situation poses great difficulty on a bank to operate viably in a town.

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<sup>11/</sup>

See Meyer and Alicbusan (1984).

One of the ways to deal with this situation is to activate a funds transfer operation.<sup>12/</sup> This is only possible among banks which have branches elsewhere whose patterns in the flow of funds are inversely correlated with at least one other branch. Thus, a bank situated in a rural area may be a net receiver or supplier of funds depending on the season.

A situation may, however, arise wherein a branch bank located in a rural area is a net supplier of funds throughout the year. This is depicted in Figure 2. This bank is known to have a structural liquidity problem as opposed to the temporary liquidity problem shown in Figure 1. The savings mobilization effort of this bank can only be sustained if excess funds can be transferred to deficit branches more profitably than lending them out to the same service area.

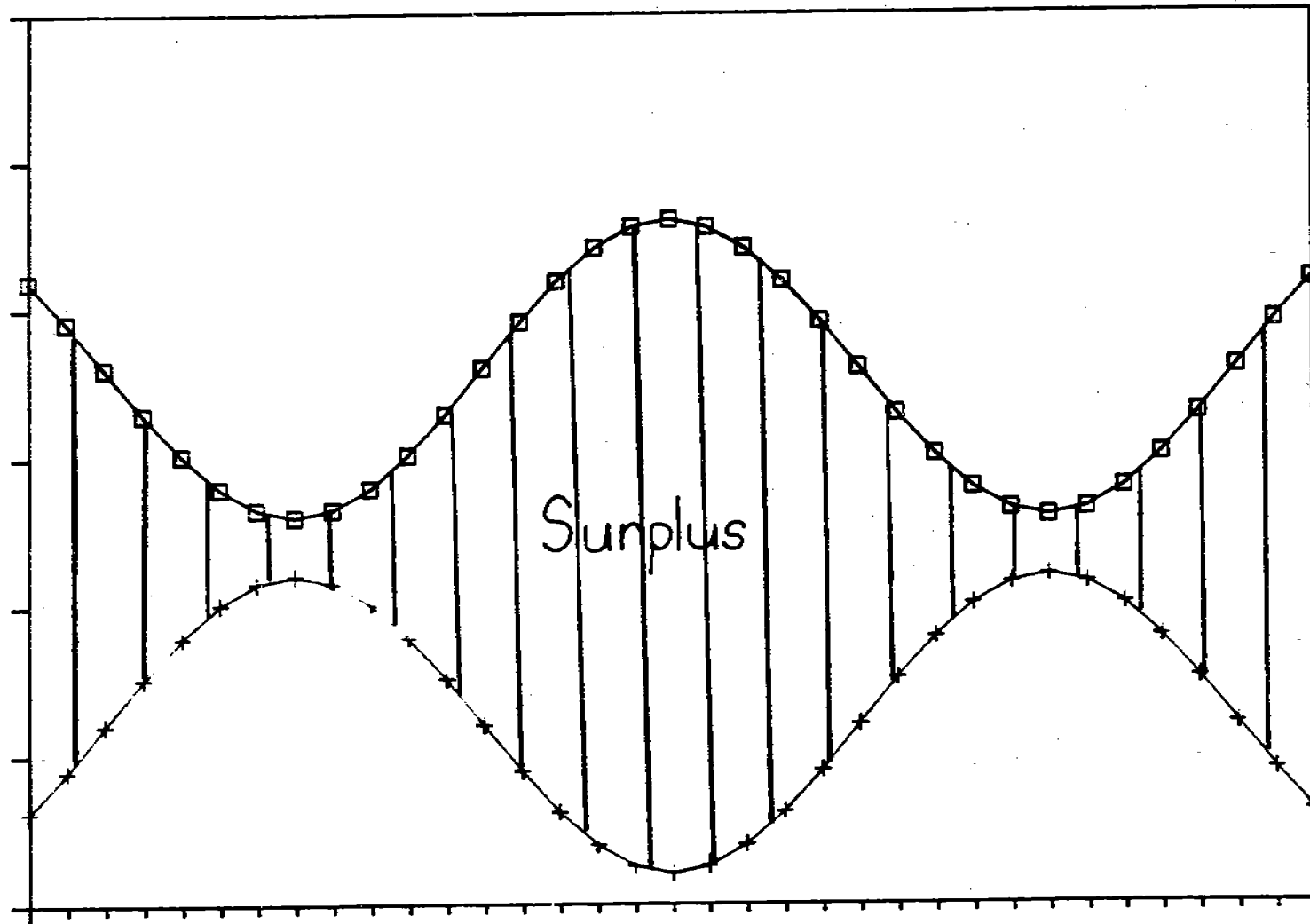
Indeed, funds transfer operations are a bank-wide activity involving the participation of the head office and its branches with a common objective to maximize global profits through better allocation of financial resources from surplus to deficit branches. In some areas, especially those which are overbranched, the deposit market of a particular branch may not be sufficient enough to cope with the demand for credit and, thus, through funds transfer operations the branch can utilize the surplus funds of other branches. In this situation, the deficit branch

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<sup>12/</sup>

Rediscounting with the Central Bank is another way out. We will not highlight this facility at this point.

Figure 2: Structural Liquidity Problem



□ Deposits

+ Viable Loan Demand

can avoid sourcing funds from the external money market which may be relatively more expensive than if the funds were mobilized through deposits or perhaps, resorting to credit rationing when external funds cannot be obtained at all to meet any excess demand. Through internal or management arrangements with regard to the use and transfer of financial resources among units, the bank as a whole can minimize the cost of production by possibly lowering the expenses incurred in sourcing bank funds.

In other words, funds transfer operations can be viewed by branch banks as a resources management system responding to policies and procedures designed to obtain more deposits and to allocate them more efficiently to alternative uses. Almost all managers interviewed in branches of commercial banks recognized the significant contribution that funds transfer operations made to the profitability of the bank as a whole. Whether or not a bank specifically perceives this fact, it is clear that the ultimate goal is to maximize profit through optimal allocation of funds.

### III. MAJOR FINDINGS

Data from this study were obtained from the Comparative Bank Study Questionnaire which was administered to a sample of rural financial institutions consisting of 38 branches of commercial and private development banks and 28 unit banks. <sup>13/</sup>

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<sup>13/</sup>

See Lamberte (1988) for a detailed discussion on sampling design for the study and a description of the contents of the Comparative Bank Study Questionnaire.

Almost all unit banks are rural banks (see Annex). Discussion on funds transfer operations will be limited only to rural-based branches of commercial and private development banks included in the sample.

Generally, the trend of funds flow is from branches operating in the rural areas to the urban-based head offices, specifically the National Capital Region (see Table 1). Over 80 percent of the total commercial bank (KB) sample transferred excess funds to their head offices located in the Metropolitan Manila area in 1986. This implies that rural-based branches of commercial banks are a potential source of funds by the head offices. On the other hand, 73 percent of the total private development bank (PDB) sample transferred funds to their head offices in the same year. At the same time, however, majority of the PDB branches received funds from their head offices, which makes it inconclusive to say that PDBs are funding most of the time the lending operations of the mother branch. The figures indicate that 94 percent of the KBs are surplus branches as against 60 percent of the PDBs.

There is a concentration of branches of commercial banks that transferred funds to other units with amounts greater than ₱1 million but not more than ₱100 million in 1986 (see Table 2). Thirteen branches transferred funds to their urban-based head offices with the exception of one branch which moved funds not only to its head office but to other branches as well. However, out of these thirteen branches, three received funds from the

Table 1. Direction of Funds Flow, 1986

Direction	Type of Bank				Total	%
	KBs	%	PDBs	%		
From sample branch to:						
Head Office (HO)	21	80.8	8	72.7	29	78.4
Regional Office (RO)	1	3.8	1	9.1	2	5.4
Other Branches (OB)	-	-	1	9.1	1	2.7
HO and OB	1	3.8	1	9.1	2	5.4
HO, RO, and OB	1	3.8	-	-	1	2.7
Did not transfer	2	7.7	-	-	2	5.4
Total	26	100.0	11	100.00	37	100.0
To sample branch from:						
Head Office (HO)	6	23.1	7	63.6	13	35.1
Regional Office (RO)	1	3.8	-	-	1	2.1
Other Branches (OB)	2	7.7	1	9.1	3	8.1
Did not receive	17	65.4	3	27.3	20	54.0
Total	26	100.0	11	100.00	37	100.0

Source: Relampagos (1988).



Table 2. Frequency Distribution of the Value of Transfers, By Type of Bank, 1986 (P)

Direction	Type of Bank				Total	%
	KBs	%	PDBs	%		
< 0	1	5.6	4	40	5	17.9
> 0 - 1M	-	-	1	10	1	3.6
>1M - 50M	8	44.4	3	30	11	39.3
>50M - 100M	5	27.8	1	10	6	21.4
>100M - 500M	3	16.7	1	10	4	14.3
> 500M	1	5.6	-	-	1	3.6
<b>TOTAL</b>	<b>18</b>	<b>100.0</b>	<b>10</b>	<b>100.0</b>	<b>28</b>	<b>100.0</b>
Mean	100,929,296		60,142,400		86,362,552	
S.D.	151,138,208		142,420,384		146,764,248	
Median	46,604,500		18,097,222		37,030,248	
Missing Obs.	KB = 9		PDB = 1		ALL = 10	

Source: Relampagos (1988).

head office, and two from other branches during the same period. Thus, eight branches made gross transfers to the head offices while five branches made net transfers.

On the other hand, almost one-half of sample PDB branches transferred funds to other units with amounts ranging from P1 million - P100 million. Two of these branches made net transfers to the head office, one branch made gross transfer to the head office, and another one, to the regional office. Four other PDB branches received funds from the head office. Thus, there were more PDB branches that were recipients of head office funds compared to KBs.

There is no significant difference in the average values of funds that surplus branches of KBs and PDBs transferred to the head office and other units. The average value of funds transferred is P110,411,369 and P108,543,856 for KBs and PDBs, respectively. However, there is a significant difference between the average values of funds received by deficit branches of KBs and PDBs from the head office and other units: P60,266,000 for KBs and P12,459,793 for PDBs. This is due to the fact that almost all KB loans are fully bank-funded while PDB loans, on the other hand, are partly government-funded (i.e., special credit programs) or Central Bank-funded (i.e., rediscounting windows). Moreover, this finding suggests that KBs are capable of handling bigger loans than PDBs.

In general, as shown in Table 2, the average value of transfers for KBs is 68 percent higher than that of PDBs.

Moreover, 94 percent of the KB sample are surplus branches compared to only 60 percent of the PDB sample.

Funds may flow directly or indirectly from branches to the head office. For branches located in the Visayas and Mindanao regions, surplus funds are channelled to the area/regional office which, in turn, moves the funds to the head office. But for branches operating in areas near the head office, excess funds can be transferred directly to the head office through an armored vehicle. Figure 3 shows these two alternatives.

One-third of the branch managers who were interviewed considered the poor viable loan demand in rural areas as one reason why their branches accumulated excess balances. This perception is due to the fact that bank branches prefer to accommodate large loans, while most production loan requirements in the rural areas are small. This is reflected in the relatively high minimum loan size requirement imposed by bank branches. Branches of commercial banks and private development banks have required minimum loan sizes averaging ₱104,057 and ₱182,318, respectively (see Table 3). Enforcement of this minimum loan size requirement definitely disqualifies small borrowers. This requirement suggests that KBs and PDBs are oriented toward the urban commercial sector where large borrowers engage in large agribusiness, manufacturing and trading operations.

Other branch managers claimed that the transfer of surplus funds to the head office is done to comply with bank management

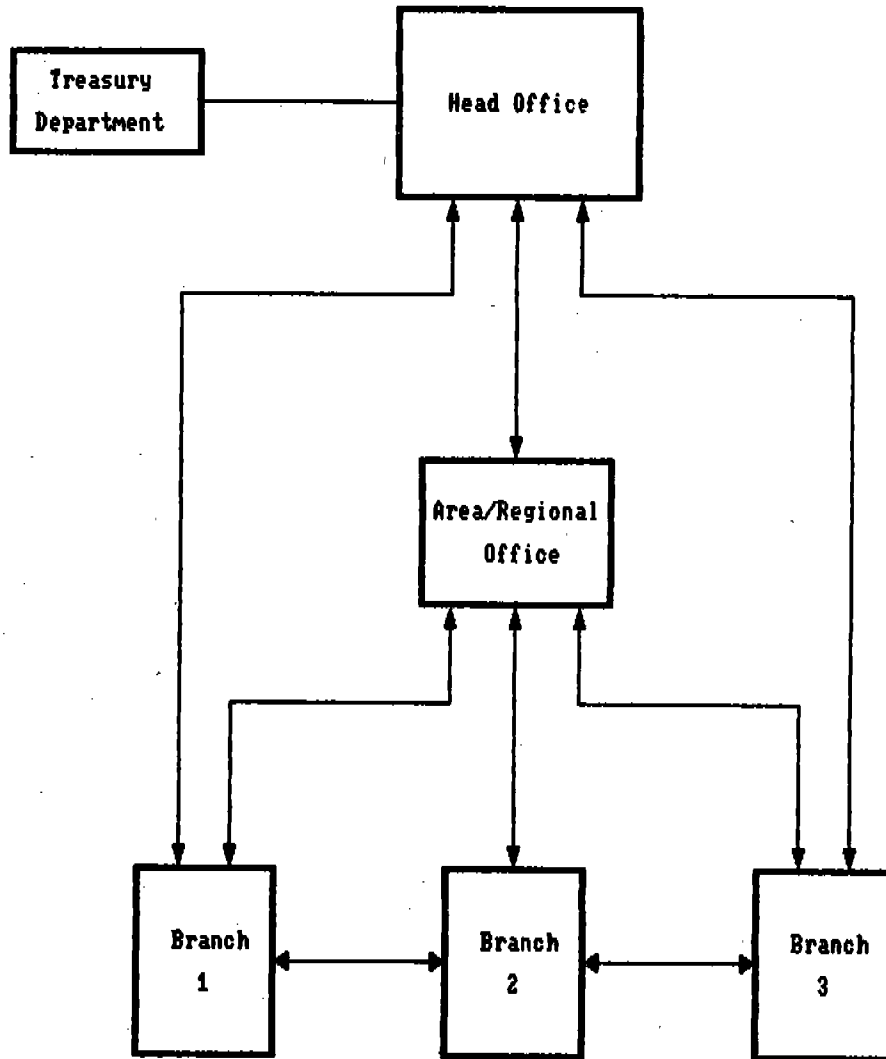


Figure 3 . Flow of Funds

**Table 3. Minimum Loan Size Requirement and Loan Ceilings  
Per Bank Type, 1986 (₱)**

	Type of Bank		All
	KBs	PDBs	
<b>1. Maximum-Amount-Per-Loan Ceiling</b>			
Mean	604,545	2,461,111	1,143,548
S.D.	479,560	2,478,882	1,591,683
Median	500,000	1,000,000	800,000
<b>2. Minimum Loan Size Requirement</b>			
Mean	104,057	182,318	127,324
S.D.	140,369	207,336	164,131
Median	51,750	100,000	100,000

Source: Relampagos (1988).

policies. It is within this context that branch managers perceive funds transfer operations as a standard operating procedure (SOP), whereby all excess funds accumulated by the branches are automatically channelled to the head office. Fifty percent of the sample KB branch managers, as against nine percent of the sample PDB branch managers, emphasized this reason. Implied in this result is the control in the decision-making functions of the branches with regard to the use of the financial resources being mobilized. The findings show that KB branches are more regulated than PDB branches. The above conclusion is corroborated by another finding which shows that the head offices of KBs determine the amount of transfers whereas the branch officers of private development banks make that determination.

PDBs have relatively higher authority level than KBs. The average value for the loan ceiling is ₱2,461,111 for PDBs compared to only ₱604,545 for KBs. It can be concluded from the foregoing results that the discretionary power of branches in granting loans is more restricted in KBs than in PDBs.

Funds transfer operations have also some favorable effects on the deposit-taking activity of a branch faced with an excess demand for credit in the service area. From the deposit interest rate and the transfer pool rate data, the average pure cost of deposit funds for both banks, 6.5 percent for KBs and 9.0 percent for PDBs, is significantly lower than the average transfer pool rate for both banks, 14.1 percent for KBs and 13.0 percent for PDBs (see Table 4). This means, therefore, that as long as

**Table 4. Transfer Pool Rates and Interest Rates, on Savings Time Deposits, By Bank Type, 1986**  
(Average for the year, in percent)

	Type of Bank		All
	KBs	PDBs	
<b>1. Transfer Pool Rates</b>			
Mean	14.1	12.0	13.8
S.D.	2.3	3.1	2.6
Median	13.7	13.0	13.7
<b>2. Deposit interest Rates</b>			
Mean	6.5	9.0	7.2
S.D.	1.6	2.0	2.0
Median	6.7	9.6	7.3

Source: Relampagos (1988).

the branch can extract deposit funds from the local savers, it can readily transfer them to other branches at a profit.

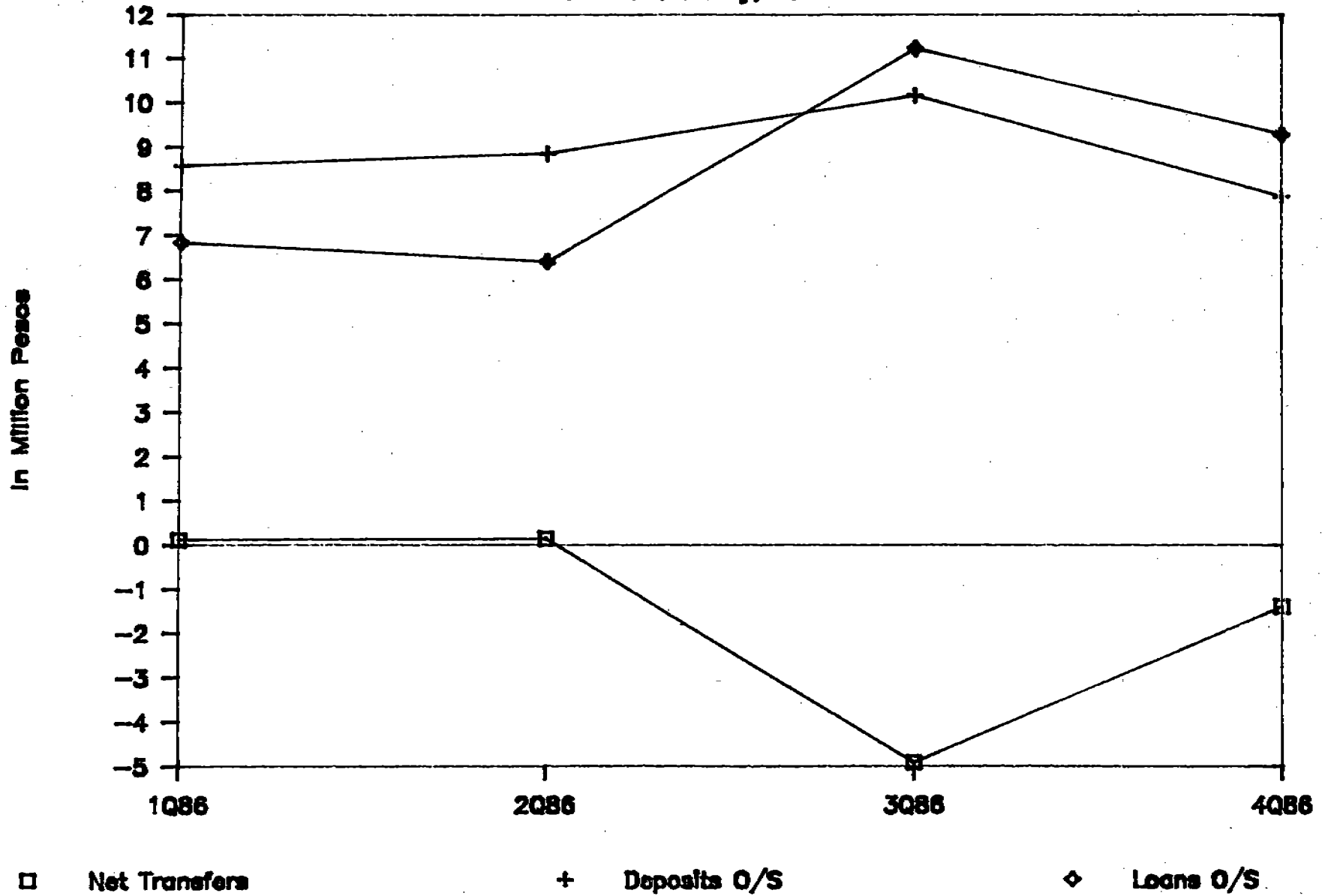
Data on net transfers on a quarterly basis in 1986 were obtained from four bank branches. These are presented in Figures 4 - 7 together with the quarterly outstanding deposits and loans of the same banks. Several observations can be made from these figures. First, almost all banks experienced a modest rise in deposits during the year. This is an indication of the intensification of their savings mobilization effort and the favorable response of the rural households. Secondly, seasonality has a more visible effect on deposits than on loans. This suggests that bank branches in the rural areas are catering more to the non-agricultural sector whose demand for credit is less sensitive to seasonality than to the agricultural sector, while they secure a greater proportion of their deposits from farm households. And, lastly, some bank branches are net funds suppliers at certain seasons and net funds receivers at other seasons of the year. These are bank branches which are encountering temporary liquidity problem. Other banks are consistently net fund suppliers throughout the year. These are banks which have structural liquidity problem. The funds transfer operations must have sustained their viability.

What factors determine the volume of funds transferred from one branch to another, or vice versa? It is hypothesized that



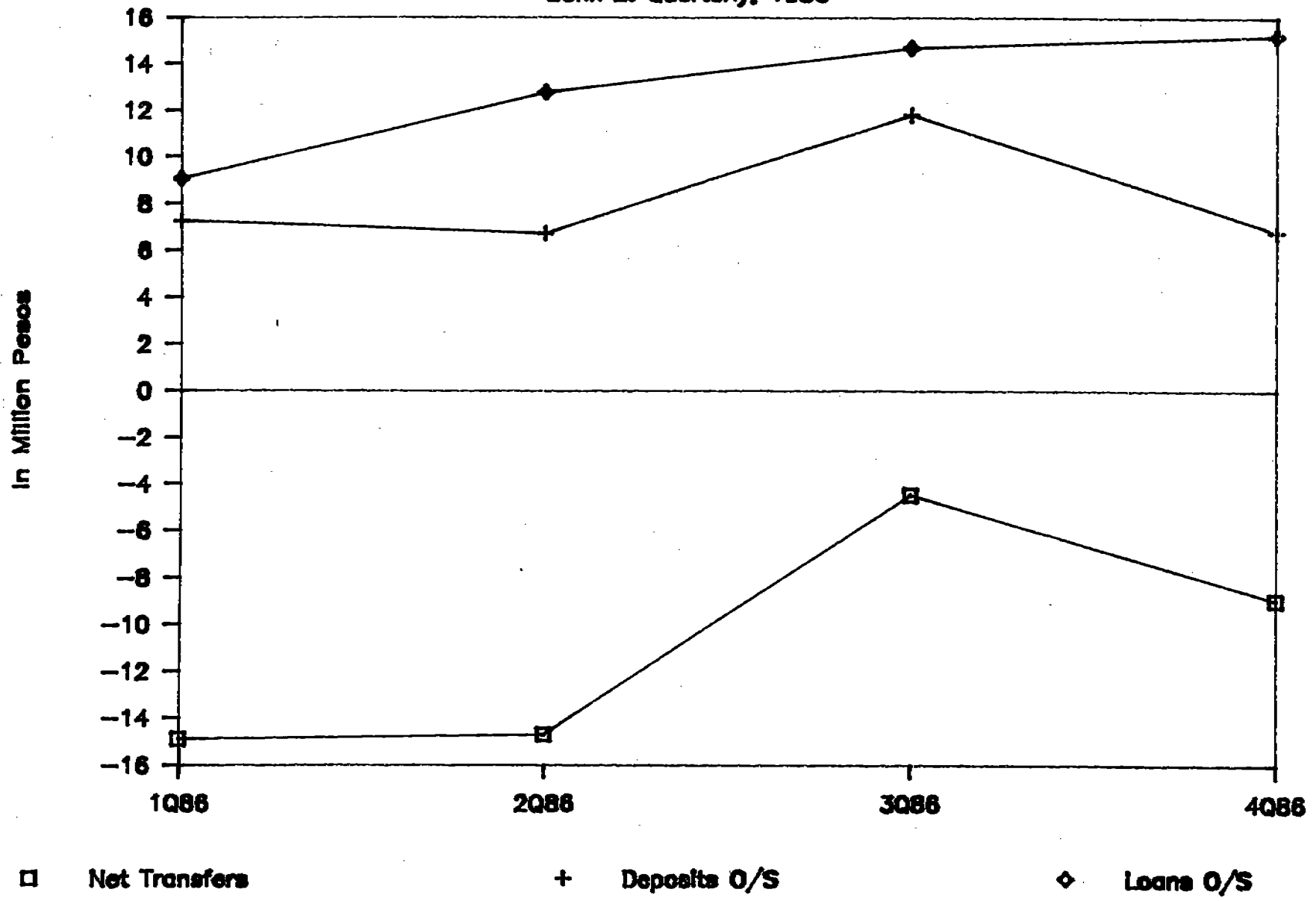
# Figure 4

Bank 1: Quarterly, 1986



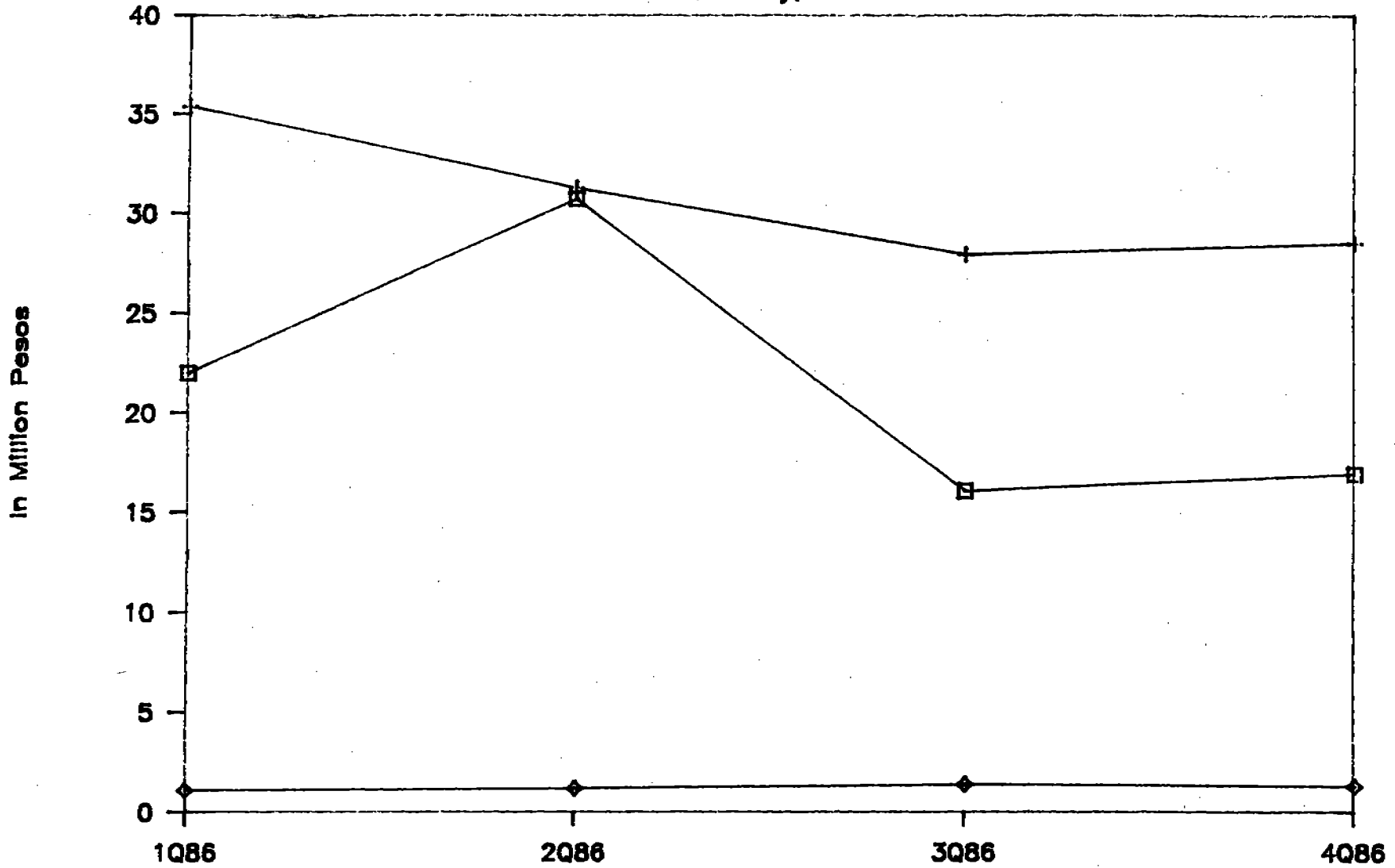
# Figure 5

Bank 2: Quarterly, 1986



# Figure 6

Bank 3: Quarterly, 1986



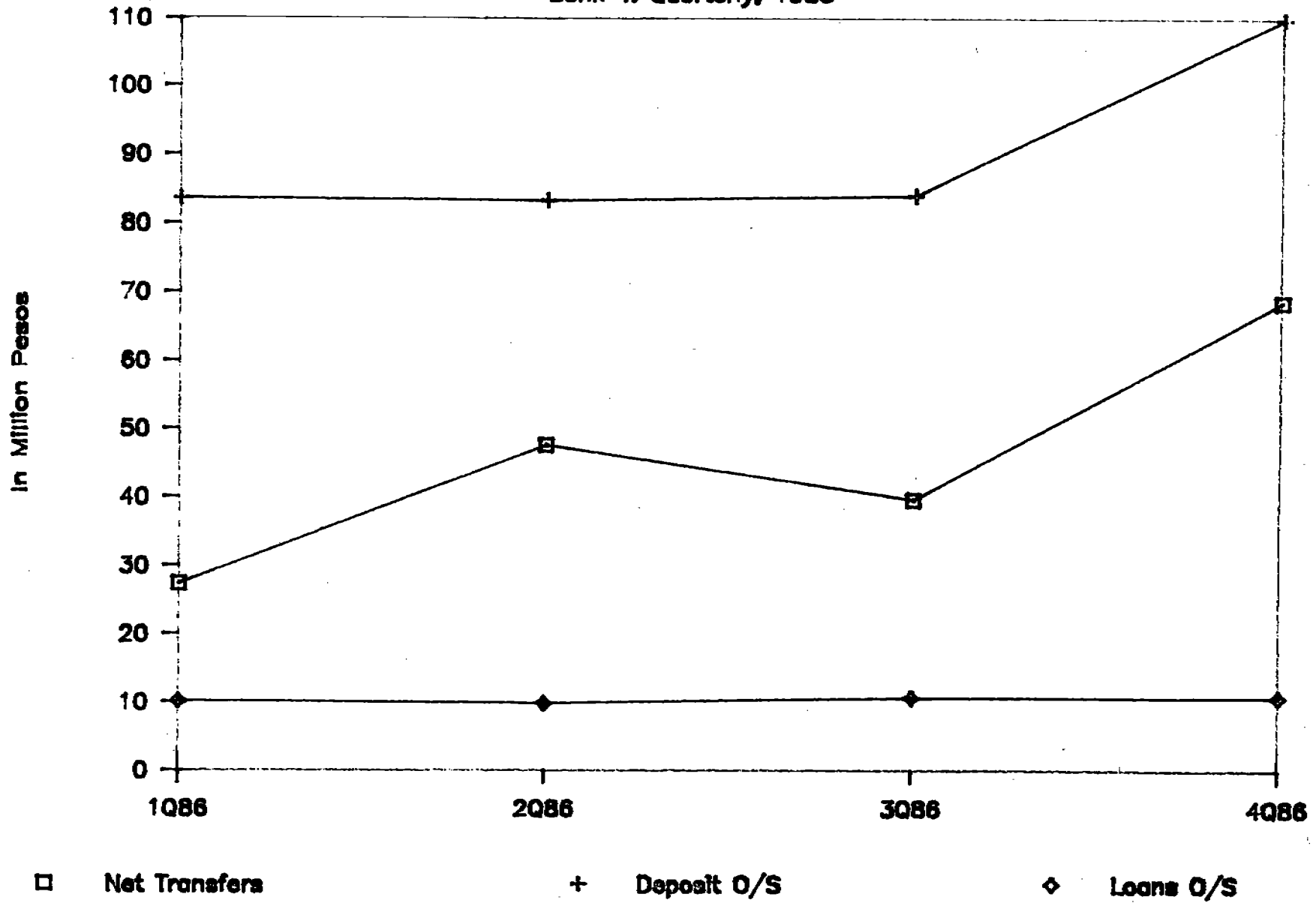
□ Net Transfers

+ Deposit O/S

◇ Loans O/S

# Figure 7

Bank 4: Quarterly, 1986



the following factors have an effect on the volume of funds transferred/received by branch banks:

1. relative prices (i.e., lending rate, deposit rate, and transfer pool rate);
2. loan-transaction costs;
3. maximum-amount-per-loan ceiling;
4. minimum loan size requirement;
5. collateral-loan ratio; and
6. loan default rate.

The decision of a branch to transfer (or borrow) funds to (from) another branch is determined by the lending rates, transfer pool rates and deposit rates. If the transfer pool rate is higher relative to the lending rate, then the branch would choose to transfer the funds to the head office rather than extend them as loans in its service area. On the other hand, a higher lending rate relative to the transfer pool rate would make lending more attractive, hence the availability of funds that can be transferred is reduced. Thus, it is hypothesized that the amount of transfers is positively correlated with the transfer pool rate, and negatively correlated with the lending rate. On the deposit side, it is hypothesized that the amount of transfers and the deposit interest rates move in the same direction. A high deposit rate offered to depositors would increase the volume of deposit funds mobilized. Consequently, the availability of funds that can be transferred will increase.

Transactions cost on lending is a major factor considered by banks in processing loan applications. It is hypothesized that high transactions cost on lending induce "selective" lending behavior among branches of KBs and PDBs which, eventually would lead to the creation of surplus funds.

The maximum-amount-per-loan ceiling is one way of regulating the branch's decision-making power in approving loan applications so as to limit its lending activities. Thus, this could result in the creation of surplus funds among branches. The hypothesis to be tested here is that a higher maximum-amount-per-loan ceiling would reduce the amount of funds that a branch can transfer to other branches, and vice versa.

A branch may require a certain minimum amount of loan per borrower. Some banks do this in order to cover at least the fixed overhead costs involved in processing loan documents regardless of the loan amount applied for. Thus, this requirement has the objective of choosing those borrowers whose value of loan applied for is at least equal to the minimum loan size. Thus, it is hypothesized that a higher minimum loan requirement creates more surplus funds in the branches, and thus, increases the amount of funds to be transferred, and vice-versa.

High collateral-loan ratio is expected to reduce loan defaults. This also screens out small borrowers who cannot meet the collateral-loan requirement. It is hypothesized that there exists a relationship between the collateral-loan ratio and the

amount of funds transferred by the branch. The relationship, however, cannot be determined a priori. A positive effect of the ratio on the volume of funds transferred would mean that a high collateral-loan ratio reduces the number of borrowers who can meet the collateral requirement which eventually leads to more surplus funds. On the other hand, a negative effect means that higher collateral-loan ratio encourages the bank to lend more because risk is reduced with the collateral. Hence, the amount of funds to be transferred will decline.

There are other factors that influence the volume of funds transferred/received. One example is the loan default rate. However, insufficient data have deterred us from including them in the model.

The model to be tested is summarized as follows:

$$TF = f(r_D, r_T, r_L, TC_L, LC, ML, C/L)$$

where

TF = amount of funds transferred/received;

$r_D$  = weighted average interest rates on savings and time deposits;

$r_T$  = transfer pool rate;

$r_L$  = weighted average lending rates of all types of loans;

$TC_L$  = cost per peso loan outstanding;

LC = maximum-amount-per-loan ceiling;

ML = minimum loan size requirement; and

C/L = collateral-loan ratio.

In the empirical model, the ratio of net transfers to total deposits in 1986 is used as the dependent variable. This is a more appropriate variable than the volume of funds transferred since it portrays the extent of funds transfer operations. Also, the ratio of transfer pool rate to lending rate is used as one independent variable rather than treating them separately in the model. Data on the cost per peso loan outstanding were obtained from Untalan and Cuevas (1988). The rest of the data were taken directly from the Comparative Bank Study Survey Questionnaire.

Table 5 shows three regression runs in logarithmic form. These are the best among several models tested. Except for the variables minimum loan size requirement and maximum-amount-per-loan ceiling in Model I, all other variables yielded the expected signs. The transfer pool rate-loan rate ratio exhibits a highly significant effect on the net transfer-to-deposit ratio in all models. This implies that the transfer pool rate is positively related or, similarly, the loan rate is negatively related, to the amount of transfers. Another variable which has a highly significant effect on the dependent variable in all models is the cost-per-peso loan outstanding. Result suggests that as the transaction costs of lending go up, banks tend to reduce their lending, thereby increasing the available funds that can be transferred. Last in the series of variables which have significant effects on dependent variable is the weighted average deposit rates. The result shows that a high deposit rate offered to savers increases the volume of deposit funds mobilized which, in turn, increases excess funds that could be transferred.



**Table 5. Parameter Estimates of Factors Affecting the Volume of Funds Transferred, All Banks, 1986**

Variable	Model I	Model II	Model III
Constant	6.312 (0.451)	-0.968 (-0.105)	7.009 (0.781)
Transfer pool rate- to-lending rate ratio	10.376 (3.576)***	7.586 (3.466)***	8.297 (3.231)***
Weighted average deposit rates	2.609 (0.982)	4.580 (2.311)**	4.209 (1.807)*
Cost-per-peso loan outstanding	1.130 (2.944)**	1.047 (3.044)***	0.933 (2.700)**
Collateral-loan ratio	-1.323 (-0.942)	-1.327 (-1.049)	- -
Minimum loan size requirement	-0.317 (-0.451)	-0.001 (-0.001)	- -
Maximum-amount-per- loan ceiling	0.155 (0.214)	- -	-0.529 (-0.872)
Dummy 0 = PDB 1 = KB	-4.546 (-2.710)**	-3.192 (-2.698)**	-4.171 (-2.749)***
$\bar{R}^2$	0.671	0.649	0.604
F-Stat	5.672***	7.175***	6.789***

**Note:**

(1) Dependent variable: Net transfers-to-total deposits ratio

(2) Figures in parentheses are the t-statistic. \*significant at 10%; \*\*significant at 5%; \*\*\*significant at 1%.

(3) Not all the sample banks are included in the regression runs because of the absence of information in some of the variables included in the model. Model I = 17 obs.; Model II = 21 obs.; Model III = 20 obs.

Source: Relampagos (1988).

The collateral-loan ratio has the expected sign, although not significant in Models I and II. But in Model III, after dropping the variables collateral-loan ratio and minimum loan size requirement, the maximum-amount-per-loan ceiling variable obtained the correct sign, although still not statistically significant. The dummy variable in all runs has a significant coefficient which means that PDBs have higher net transfers relative to deposits than KBs. Lastly, the F-statistics of all models are significant at one percent level implying a strong statistical relationship between the explanatory variables and the dependent variable.

Table 6 shows the regression runs in logarithmic form of the deposit mobilization model. This model includes both branch banks and unit banks. In Model I, a dummy variable is included with values zero for unit banks and one for branch banks. It yielded a significant coefficient implying that branch banks tend to mobilize more deposits than unit banks. The weighted average deposit rates and loan rates have the expected positive coefficients, although not statistically significant.

In Model II, the transfer pool rate is used. This variable was not transformed into natural log since a zero value is assigned in each of the unit banks. The result obtained here is similar to the previous result when a dummy variable is used. The transfer pool rate coefficient is positive and significant at one percent level. It is important to note that the transfer pool rate in this case acts as a dummy variable. That is why the

Table 6. Regression Results, Deposit Mobilization Model,  
All Banks, 1986

Variable	Model I	Model II
Constant	-4.366 (-1.667)*	-4.026 (-1.608)
Weighted average deposit rates	0.266 (0.532)	0.254 (0.517)
Loan rates	0.915 (1.346)	0.815 (1.243)
Transfer pool rates	- -	0.067 (3.019)***
Dummy variable 0 = unit banks 1 = branch banks	0.985 (2.937)***	- -
$\frac{R^2}{R}$	0.138	0.146
F-statistic	3.351**	3.519**

Note:

- (a) Dependent variable: Total deposits - total assets ratio  
 (b) No. of observation: 45  
 (c) Figures in parentheses are the t-statistic. \*significant at 10%; \*\*significant at 5%; \*\*\*significant at 1%.

Source: Relampagos (1988).

results of the two models are basically the same. Implied in the results is the favorable effect of the funds transfer operations on the deposit mobilization efforts of the branches of commercial banks and private development banks. Thus, branch banks tend to mobilize more deposits than unit banks in the same service area partly because of the availability of funds transfer mechanism.

#### IV. POLICY IMPLICATIONS

The results of the study show how branches of commercial banks and private development banks deal with the problem of operating in rural areas where most borrowers are considered less credit-worthy and where small loans are deemed unprofitable. The funds transfer operations of the branch banking system allow banks to efficiently allocate bank-wide resources from surplus to deficit branches.

The benefit from funds transfer operations is that it serves as an impetus for branches of commercial banks and private development banks to intensify their efforts to mobilize rural savings. Regardless of the seasonality of funds flow in rural areas, branches are not worried about having possible outlets for deposit funds since they can always resort to moving them to other branches faced with high level of demand for credit in their service areas. The reverse is true in the case of deficit branches.

The major contributions of funds transfer operations among commercial banks and private development banks should therefore

be considered in the formulation of policies aimed at improving the present situation of the rural sector. Most important of all, policymakers should aim for greater consistency between the rural-agricultural policies and various government programs which call on financial intermediaries to extend their operations in the rural areas. The bottom line is that with the withdrawal of subsidized credit programs, RFIs have to be viable first.

In light of the results of this study, certain government policies need to be re-examined. Specifically, the deposit retention scheme directly works against the objective of banks, especially in the branch banking system, to maximize profit or net returns on present cash flows through better allocation of financial resources from surplus to deficit branches. It is understandable that the government aims to increase the flow of credit to the rural-agricultural sector, but this should not be accomplished at the expense of the viability of banks. Whenever RFIs experience temporary liquidity problem, i.e., they are highly liquid at one season and illiquid at another season, or structural liquidity problem, i.e., they have excess liquidity throughout the period, then they should be allowed to direct funds to the most profitable uses, or obtain funds from the cheapest source. That most bank branches in the rural areas transferred their excess funds to the urban centers is an open invitation to fine tune policies so as to effect economy-wide structural changes. Thus, trade, price and fiscal policies that are biased against rural economic activities thereby making them unprofitable need to be reconsidered. This, together with the

removal of the deposit retention policy and the introduction of a more liberal branching policy, can attract more banks to expand their banking services in the rural areas.

The deposit retention scheme, if it perpetuates, may also work against the efforts of banks to mobilize rural savings. Compelling banks to invest 75 percent of their total deposit resources in the same service area is tantamount to saying that even less worthy projects will be financed by banks to meet the required investment quota. This may alter the perception of banks to intensify their deposit-taking efforts if they cannot obtain attractive returns from their investment undertakings. One shortcoming of this scheme, therefore, is the inefficient use of deposit funds over time as banks may forego a better alternative investment option in other areas which could have earned them higher net returns. One of the groups of losers would be the surplus units who will not be offered by banks attractive interest rates on deposits.

The absence of funds transfer operations in the unit banking system should be considered seriously in framing up government policies which aim to increase credit supply in the rural-agricultural sector and, at the same time, to ensure the viability of these rural-based financial institutions. Perhaps, the appropriate policy here is to encourage unit banks to strengthen linkages among themselves and/or with branches of KBs and PDBs in other areas to effect interbank funds transfer operations. However, the agri/agra requirement

and deposit retention policies impede such development. Also, the single borrower's limit which is set at 15 percent of the bank's unimpaired capital and surplus can hinder unit banks with excess funds from lending to deficit unit banks or branch banks, as the case may be. Thus, removing such restrictive banking policies to allow unit banks to effect funds transfers would greatly benefit them. <sup>14/</sup>

Finally, the development of non-agricultural economic activities in the rural areas should be seriously pursued. Here, aside from appropriate trade and price facilities, the provision of rural infrastructures, such as electricity, good roads, adequate port facilities, communication, etc., can raise the profitability of rural-based, non-agricultural micro-enterprises. With a broader economic base having heterogeneous cash flow patterns, the seasonality of economic activities would be inconsequential to the viability of RFIs. In this regard, the current thinking, which is gaining popularity among lawmakers, of requiring banks to lend at least 3 percent of their loanable funds to micro-enterprises is certainly a retrogression. Ironically, this comes at a time when support for the removal of the agri/agra requirement is rapidly growing. The experience of this country as well as of other countries with loan portfolio regulations should be considered in formulating laws and policies. It is said that history repeats itself. But this is not a natural law! This happens only when men refuse to learn from experience.

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However, the single borrower limit to non-bank borrowers should be retained.

## References

- Blanco, Rhenee and Richard Meyer. "Rural Deposit Mobilization in the Philippines, 1977-1986". A Paper Presented at the Workshop: "Financial Intermediation in the Rural Sector: Research Results and Policy Issues" held at the Central Bank, Manila on 26-27 September 1988.
- Cohen, Kalman J. and Chun H. Sam. "A Linear Programming Planning Model for Bank Holding Companies". Journal of Bank Research, Autumn 1979.
- Lamberte, Mario B. "Sampling Design and Questionnaire for the Comparative Bank Study: Technical Notes" (1988).
- \_\_\_\_\_ and Ma. Theresa Bunda. "The Financial Markets in Low-Income Urban Communities: The Case of Sapang Palay". PIDS Working Paper Series No. 88-05. March 1988.
- \_\_\_\_\_ and Joseph Lim. "Rural Financial Markets: A Review of Literature." PIDS Staff Paper Series No. 87-02, 1987.
- Lapar, Ma. Lucila and Douglas Graham. "Credit Rationing Under a Deregulated Financial System." A Paper Presented at the Workshop: "Financial Intermediation in the Rural Sector: Research Results and Policy Issues" held at the Central Bank, Manila on 26-27 September 1988.
- Magno, Marife and Richard Meyer. "Scope and Performance of Credit Guarantee Programs in the Philippines," A Paper Presented at the Workshop: "Financial Intermediation in the Rural Sector: Research Results and Policy Issues" held at the Central Bank, Manila on 26-27 September 1988.
- Mayne, Lucille S. "Funds Transfer Between Bank Holding Companies and their Affiliates". Journal of Bank Research. Spring, 1980.
- Meyer, Richard and Adelaida Alicbusan. "Farm-household et al. Undermining Rural Development with Cheap Credit". (West View Press: London, 1984).
- Relampagos, Julius P. Funds Transfer Operations and Savings Mobilization Among Branch Banks in the Rural Areas, M.A. Thesis. University of the Philippines School of Economics, 1988.
- Sacay, Orlando J. Meliza H. Agabin, and Chita Irene E. Tanchoco. Small Farmer Credit Dilemma. Manila, TBAC, 1985.



Store, Bernell K. and Ned C. Hill. "Cash Transfer Scheduling for Efficient Cash Concentration," Financial Management, Autumn, 1980.

\_\_\_\_\_. "Alternative Cash Transfer Mechanisms and Methods: Evaluation Frameworks," Journal of Bank Research. Spring 1982.

Technical Board for Agricultural Credit. "A Review of Subsidies and Incentives Structure of Rural Banks". TBAC, Manila. February, 1981.

\_\_\_\_\_. The Farm and the Household: The Microworld of the Farmer, Manila: PCAC, 1981.

Tolentino, V. Bruce J. "Current Imperatives and Developments in Philippine Agricultural Credit Policy", Economics and Sociology Occasional Paper No. 1324. March 1987.

Untalan, Teodoro and Carlos Cuevas. "Transactions Costs of Banks and the Viability of Rural Financial Intermediaries". A Paper Presented at the Workshop: "Financial Intermediation in the Rural Sector: Research Results and Policy Issues" held at the Central Bank, Manila on 26-27 September 1988.

## ANNEX

Sample

The targetted 66 banks were selected from the following provinces: Pangasinan, Nueva Ecija, Laguna, Batangas, Camarines Sur, Iloilo, Negros Oriental, and Misamis Oriental. These are classified below according to types of banks.

## Classification of Sample Banks

	<u>Type</u>	<u>Number</u>	<u>Percentage</u>
<b>Branch Banks</b>			
(1)	KBs	27	40.9
(2)	PDBs	11	16.7
<b>Unit Banks</b>			
(1)	RBs	23	34.8
(2)	PDBs	5	7.6
		-----	-----
	<b>Total</b>	<b>66</b>	<b>100.0</b>



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