

TRANSACTION COST AND THE VIABILITY OF RURAL FINANCIAL INTERMEDIARIES*

*Teodoro S. Untalan and Carlos E. Cuevas***

Introduction

Rationale and Objectives of the Study

The definition of transaction cost as used here departs from its usual meaning which is the measure of "friction" in any intermediation process. Transaction cost in this study is the cost incurred as banks perform the role of intermediary among savers and user of funds. This results from bank operations in lending and mobilizing funds, as well as from other operations, e.g., investments. Transaction cost includes administrative costs, i.e., personnel and fixed costs as well as risk-related costs, that are normally encountered in dispensing and keeping these funds. It is a vital aspect of the bank's operational capability and largely determines the bank's viability as an intermediary.

The process of intermediation is the result of banks' comparative advantage in bringing about a market mechanism for the efficient transfer of claims on resources from surplus units to deficit units. High transaction cost runs against this rationale and impedes the intermediary's efficiency in resource allocation and distribution.

Against the backdrop of the increasing need to provide credit to the agricultural sector, the continued existence of intermediaries in the rural sector is necessary. The present thrust of Philippine economic development of uplifting the income of rural families through the growth of the

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**Respectively, Research Associate, PIDS and Professor, OSU. The views expressed in this study are those of the authors and do not necessarily reflect those of the Institute.

agricultural sector only serves to highlight the need for a continuous supply of credit to rural households. Over the years, the share of agricultural credit to total credit has substantially declined and yet agriculture has remained to be a very important source of livelihood for most Filipinos considering that about 81 percent of Filipino families in the lowest 30 percent income class derive their income from agriculture (Tolentino 1987).

In the past, attempts were made to infuse cheap funds into the rural sector through the formal financial system with the hope that the availability of credit could stimulate the development of the agricultural sector. While the intention of providing cheap credit is noble, it overlooks its adverse effects on the transaction cost of banks. Banks' cost of administering donor-sourced funds could be high, thus affecting their operations and compromising their viability (Cuevas 1984). The recognition of this problem has recently led to some policy changes. Apart from ensuring the continuous flow of credit to the rural sector, the new set of policies also seeks to protect banks from incurring unnecessarily high intermediation costs.

This paper attempts to examine the transaction cost of banks. Its specific objectives are:

- 1) to develop a method of estimating transaction cost for each bank activity, i.e., lending cost, funds mobilization and general administration;
- 2) to explain the differences and the composition of transaction cost among commercial banks (KBs), private development banks (PDBs), and rural banks (RBs).

Recognizing the need to continually introduce improvements for the efficient functioning of the formal financial system as a sector vital to economic growth, knowledge of banks' transaction cost is important. It can serve as a policy benchmark on which future changes and improvements in the financial system can be based. These may in turn induce banks to assume a wider role in the whole financial process ensuring a stable flow of credit to the rural sector.

Organization of the Study

Section II discusses the components of bank cost. A detailed presentation of the methods and procedures of estimating the transaction cost of banks and a description of the sources and limitations of data are given in Section III. Section IV presents the empirical findings of the study. Finally, Section V summarizes the results and discusses some policy implications.

Conceptual Issues

A bank incurs costs in the process of mobilizing and lending funds. These costs may be grouped into three categories. First, the interest cost paid to its depositors or its interest cost. Second, the incidental expenses incurred such as insurance for its deposits, insurance premia for its loans, as well as fines and penalties. Finally, the administrative costs such as the salaries and depreciation cost to bank premises, furniture, fixtures, equipments and others.

These costs, together with the interest cost of funds, determine the overall costs or total cost of intermediation for a bank:

The bank's transaction cost can be summarized as:

$$TCost = LCost + FCost + GCost + OCost$$

where

TCost = transaction cost of the bank

Lcost = lending cost

FCost = funds-mobilization cost

GCost = general administration cost

OCost = other operational costs, e.g. investments

Cost of Funds

The bank incurs financial expenses in the form of interest payments paid to depositors. Similarly, the bank pays interest on funds obtained from the Central Bank rediscounting window, borrowings from other banks, and/or special lending programs. These are the bank's pure costs of funds or interest costs.

Incidental Expenses

In its lending operations, the bank incurs risk-related costs for its loan delivery and recovery. These may come in the form of guarantee fees or insurance premia applicable to particular loans in the bank's portfolio when it participates with the special lending programs. These are necessary costs for banks as additional security against defaults or bad debts. In addition, banks also incur costs in the provisions for bad debts, or loan default as well a litigation expenses associated with the foreclosures.

The bank also incurs incidental expenses in its funds-mobilization

such as deposit insurance, and the fines and penalties paid by the bank when it cannot meet the reserve requirements.

Administrative Costs

In performing its funds-mobilization and lending operations, banks incur variable and fixed expenses. On the funds-mobilization side, variable expenses correspond to the salaries paid to personnel involved in the bank's deposit-taking and borrowing operations. Fixed costs associated with funds mobilization are its share of depreciation costs on building, fixtures and equipment used in the bank's operation and other overhead expenses.

Similarly, administrative expenses such as salaries for personnel involved in loan processing, supervision, monitoring, and collection activities are incurred in the bank's lending operations. These also have their counterpart in the depreciation costs of the building, fixtures and equipment as well as overhead expenses.

There are administrative costs of the bank which are clearly identifiable in terms of lending operations and deposit-mobilization activities. Where other costs cannot be directly or specifically associated with any of the bank's major activities, then these are considered as general administration costs which are incurred in other operations of the bank. In the same manner as funds-mobilization and lending costs, these include salaries for personnel involved in general administrative work and depreciation cost for the building, fixtures and equipment and other expenses related to such operations.

Opportunity Cost of Funds

Imputed costs of funds result from the opportunity cost of funds locked in loans overdue. Similarly, opportunity costs may be imputed by some banks due to the differences in the required reserves for these banks. Computation may be based on the market cost of funds applied to the total volume of funds under consideration. However, this cost is not considered in this study.

Methods and Procedures

This section presents the methods and procedures used in estimating the transaction cost of banks from the set of primary data.

Time Allocation and Transaction Cost

A table of time-allocation for the different functions in a bank was completed by each bank staff (Table 1-A). Each staff was asked to give, in percentages, the time allocated to each of the pre-identified bank activities (Appendix 1). A corresponding personnel compensation table was completed with the monthly salary for each bank staff (Table 1-B).

From these initial data, estimation of the values of transaction cost for each bank is done by first, giving weights to the percentage of time allocated by each personnel by using the salary of that personnel from the personnel compensation table. This is done by multiplying the time allocation of one personnel for the different bank activities (Table 1-A) by his corresponding salary (Table 1-B).

In order to reduce the number of variables needed in processing the data, bank personnel or positions were grouped into classes having the same or similar functions and were assigned one variable (Appendix 2). The guidelines followed are given in Appendix 3.

From the weighted percentages of time-allocation provided by each bank personnel for the different bank functions, a horizontal summation for each function across all bank personnel was made. Using this weighted time-allocation for each bank activity, the percent share of each function was taken from the total (Table 2-A).

Columns (1), (2), and (3) show the weighted time allocation in pesos for the different positions.

The weighted time allocation for each bank activity across all bank personnel is summed up in column (4). The percentages in column (5) are then derived by taking the share of each bank activity to the total as given in column (4).

The resulting shares in percentages were used to allocate personnel costs i.e., salaries, and non-personnel costs, i.e., depreciation from the bank's income and expense statements (Table 2-B). For other expense items appearing in the income and expense statements which are clearly identifiable with specific bank activities, e.g., deposit insurance or guarantee fees, these are immediately allocated to that particular bank activity (Table 3). Column (1) gives the share of each bank activity in the total expenses on personnel, i.e., salaries, benefits, bonuses for each bank activity. In this case, column 1, item A is the share of the bank's lending operations in the total expenses on bank personnel. In the same manner, the share of each bank activity in the bank's non-personnel expenses, i.e., depreciation, taxes are given in column (3). Column (2) is the direct allocation of costs specific of a bank activity. For example, insurance premia is directly attributed to lending cost since these are costs related to lending. The sum of both personnel and non-personnel costs

Table 1**A. TIME-ALLOCATION TABLE**

<i>Bank Activity/ Function *</i>	<i>Bank Personnel</i>		
	<i>Manager</i>	<i>Accountant</i>	<i>Teller</i>
A. Lending (1-10)	50%	70%	
B. Investments			
C. Trust			
D. Funds- Mobilization (1 - 5)	50%	30%	100%
E. Gen. Administration			
TOTAL	100%	100%	100%

B. PERSONNEL COMPENSATION TABLE

1. Manager	₱1,000
2. Accountant	₱ 700
3. Teller	₱ 500

* See Appendix 1 for breakdown

for each bank activity is given in column (4). The corresponding shares of each bank activity from the total is given in column (5).

The allocation or breakdown of the transaction cost for each major bank activity can then be derived by taking the shares of these activities in total costs.

Sources and Description of Data

This study used a sample of 64 out of a total of 66 banks classified according to type, location, and class. Two of the total number of banks did not give any information related to the aspects which were considered in this study. Of this sample, 22 are rural banks, 17 are private development banks, and 25 are commercial banks. All of the banks sampled are located outside Metro-Manila or are considered as operating in a rural or

Table 2

A. WEIGHTED TIME-ALLOCATION TABLE

<i>Bank Activity/ Function</i>	<i>Bank Personnel</i>			<i>Total</i>	
	<i>Manager</i>	<i>Accountant</i>	<i>Teller</i>		
	(1)	(2)	(3)	(4)	(5)
a. Lending	₱500	₱490		₱990	45%
b. Investment					
c. Trust					
d. Funds- Mobilization	₱500	₱210	₱500	₱1210	55%
e. Gen. Administration					
TOTAL	₱1000	₱700	₱500	₱2200	100%

B. BANK'S INCOME AND EXPENSE STATEMENTS

- a. Salaries and Wages (Personnel)
- b. Depreciation / Other Operating Expenses
(Non-Personnel)

sub-urban setting.

The data gathered were qualitative and quantitative responses to the survey questionnaire augmented by supporting documents such as income statements, balance sheets, and job descriptions. The data was from a single year from January to December 1986.

Raw data were obtained on the time-allocation of each personnel for the different functions of a bank. Each bank personnel was represented as everyone is made to respond to the time-allocation table. The basic information obtained was the percentage of the time of each personnel allocated per function.

Table 3
TRANSACTION COST

Bank Activity/ Function	Personnel Cost		Non-Personnel Cost		Total	
	(1)	Exclusive (2)	Non-exclusive (3)	P (4)	% (5)	
A. Lending	₱	insurance premia	₱	A	%	
B. Investment	₱		₱	B	%	
C. Trust	₱		₱	C	%	
D. Funds Mobilization	₱	deposit insurance	₱	D	%	
E. Gen. Admin.	₱		₱	E	%	
Transaction Cost =					100%	

Thus, from the foregoing:

$$\text{Transaction Cost (TCost)} = A + B + C + D + E .$$

where

- A is the total cost of lending by the bank;
- B is the total cost for investment operations;
- C is the total cost for trust operations;
- D is the total cost for funds-mobilization; and
- E is the total cost for general administration.

Limitations of the Data

Quantitative responses from the set of primary data collected maybe partly qualitative in nature as these may depend on the respondent's interpretation of the question at hand and the time-frame. This maybe particularly true where the respondents were asked about the allocation of

their time to the different bank activities. Nevertheless, their responses maybe considered as best estimates.

In addition, answer to such questions as loan as a percentage of collateral, and number of repeat borrowers serviced were based on best estimates by the respondent in cases where bank records were not readily available.

Lastly, data on bank expenses although lifted straight from the banks' income and expense statements, may not exactly reflect actual costs incurred for some bank activities. This is particularly true for KBs and PDBs where loan processing costs may be undervalued since part of activities of processing a loan are done at the head office but these costs may not be properly accounted for by the branch. These might have produced biased estimates.

Empirical Results

This section discusses several sets of results. The first sub-section provides an overview of the transactions costs and the different composition of these costs among KBs, PDBs, and RBs. The next sub-sections, pp. 55 and 64, focus on the lending costs and funds-mobilization costs, respectively, among the different bank types. These sub-sections present the composition of the costs of lending and funds-mobilization, two of the banks major operations, and attempt to explain the differences in this composition across the three bank types.

Sub-sections on pp. 66 and 73 relate the costs of lending and funds mobilization to the respective number and value of loans and deposits, in order to determine the per unit cost of providing these services. The costs per loan and per deposit provide indication of the comparative advantage of different bank types in providing these services to their customers.

Total Transaction Cost: A Comparative Analysis

Forty-nine of the 66 banks and bank branches in the sample reported time-allocation tables and income statements. Of these 49 banks, 16 are rural banks, 14 are private development banks and 19 are commercial banks.

Total transaction cost for the overall sample of forty nine banks combined are due primarily to funds-mobilization activities, 49.8% (see Table 4). Transaction cost associated with lending operations account only for 27.9 percent of the total. Bank activities related to administrative and general services account for 20.9 percent of the total transaction

Table 4
TRANSACTION COST
(in thousand pesos)

	ALL BANKS		KBs		PDBs		RBs	
	Pesos	%	Pesos	%	Pesos	%	Pesos	%
TOTAL LENDING COSTS:	20694.47	27.85	9503.33	19.72	5401.50	38.55	5789.64	47.83
Planning & Programming	1468.17	1.98	902.52	1.87	233.83	1.67	331.82	2.74
Ads & Promo	440.33	0.59	162.58	0.34	115.65	0.83	162.10	1.34
Disbursement	1054.60	1.42	412.11	0.86	286.98	2.05	355.51	2.94
Unspecified	2886.99	3.89	1128.10	2.34	677.85	4.84	1081.04	8.93
Loan Processing:								
Interview of Applicants	1646.16	2.22	693.84	1.44	446.38	3.19	505.94	4.18
Credit Investigation	2356.23	3.17	1186.04	2.46	709.32	5.06	460.87	3.81
Evaluation & Analysis	2305.38	3.10	1229.27	2.55	382.41	2.73	693.70	5.73
	6307.760	8.49	3109.15	6.45	1538.11	10.98	1660.50	13.72
Loan Recovery:								
Monitoring	1054.95	1.42	641.08	1.33	212.43	1.52	201.44	1.66
Collection	1526.89	2.06	518.33	1.08	560.96	4.00	447.60	3.70
Record-keeping/ Report-writing	2886.19	3.88	1148.54	2.38	880.90	6.29	856.75	7.08
Mgt. of bad debts	3068.59	4.13	1480.91	3.07	894.79	6.39	692.89	5.72
	8536.63	11.49	3788.86	7.86	2549.08	18.19	2198.68	18.16

Table 4, continuation

	ALL BANKS		KBs		PDBs		RBs	
	Pesos	%	Pesos	%	Pesos	%	Pesos	%
INVESTMENTS	569.19	0.77	83.71	0.17	272.89	1.95	212.59	1.76
TRUST OPERATIONS	522.72	0.70	402.09	0.83	112.18	0.80	8.46	0.07
TOTAL FUNDS-								
MOBILIZATION COSTS:	37010.21	49.81	27241.05	56.53	5146.21	36.73	4622.95	38.19
Transactions with CB, other banks	2335.82	3.14	1250.52	2.60	274.40	1.96	810.90	6.70
Transactions with Depositors	17636.44	23.74	14223.77	29.52	2250.75	16.07	1161.92	9.60
Record-keeping	8589.63	11.56	6443.39	13.37	1293.56	9.23	852.68	7.04
Funds-Transfer	1529.69	2.06	1098.31	2.28	355.90	2.54	75.48	0.62
Ads & Promo	2250.03	3.03	1552.76	3.22	380.58	2.72	316.70	2.62
Unspecified	4663.80	6.28	2671.77	5.54	586.75	4.19	1405.27	11.61
GENERAL ADMINISTRATION/ SERVICES	15502.65	20.87	10954.44	22.73	3077.32	21.97	1470.88	12.15
TRANSACTIONS COSTS:	74299.23	100.00	48184.61	100.00	14010.1	100.00	12104.51	100.00

Source: Comparative Bank Study, 1987

cost, while the rest corresponds to other bank operations such as investment, 0.77 percent, and trust, 0.70 percent.

Transactions with bank depositors and clients represent almost one-half of the costs of funds-mobilization activities for these banks. This indicates that an important proportion of bank resources is allocated to raising funds from the public for their operations. Activities related to transactions between these banks and the Central Bank (CB) and other banks account for only 3.1 percent of total transaction cost. The disparity in these shares in costs underlines the preference by these banks to source their funds from the public rather than from other sources. However, the cost of mobilizing funds from the Central Bank is not negligible, as is usually assumed.

In their lending operations, activities related to loan processing account for 8.5 percent of total transaction cost. A larger proportion (11.5%) of their costs is attributed to loan recovery efforts. The latter suggests a cautious attitude towards lending and the banks' greater effort to recover funds. It is noteworthy that banks incur minimal costs in promoting its lending activities. This suggests that banks do not really exert effort to attract prospective borrowers. Banks, on the other hand, incur higher costs relative to their total transaction cost in their deposit mobilization activities, indicating that banks make a more serious effort in attracting depositors than borrowers. This is shown by the relative shares in total transaction cost of advertising and promotions cost specific to loans (0.6%) against advertising and promotions cost specific to deposits (3.0%).

Among types of banks, transaction cost on the average are highest among KBs, P2.5M, followed by PDBs, P1M, with RBs having the lowest transaction cost, P.79M, (see Table 5). There is a greater dispersion in transaction cost among KBs, followed by PDBs then RBs. About 36.8 percent of the commercial banks surveyed have transaction cost above P2.5M. Most PDBs and RBs have transaction cost of P1M or less, respectively. This is to be expected since KBs have bigger operations than PDBs and RBs. They have more personnel allocated to provide various services to their clientele. A typical KB has on the average a staff of 22 with PDBs having 16 and RBs 16 including officers and management personnel (Table 6). KBs also have higher fixed costs, i.e., depreciation for their building and equipments. Another important contributing factor is the relatively higher salary scale of KB personnel than either PDBs and RBs. This only serves to underscore the fact that the size of the bank has a bearing on the magnitude of its transaction cost.

When the composition of transaction cost is compared among bank types (Table 4), more than half (56.5%) of overall transaction cost of KBs come from funds-mobilization. Only 19.7 percent of their transaction cost

Table 5
COMPARATIVE TRANSACTION COST
(in thousand pesos)

TRANSACTIONS COST	KBs		PDBs		RBs		ROW TOTAL	KBs	PDBs	RBs
	Number	%	Number	%	Number	%		%	%	%
500 & less	0	0.00	3	21.43	3	18.76	6	0.00	50.00	50.00
1000 & less	1	5.26	6	42.86	8	50.00	15	6.67	40.00	53.33
1500 & less	1	5.26	2	14.29	5	31.25	8	12.50	25.00	62.50
2000 & less	4	21.05	2	14.29	0	0.00	6	66.67	33.33	0.00
2500 & less	6	31.58	0	0.00	0	0.00	6	100.00	0.00	0.00
2500 +	7	36.84	1	7.14	0	0.00	8	87.50	12.50	0.00
TOTAL	19	100	14	100	16	100				

AVG:	2536.032	1000.721	798.582
SD:	1020.332	640.038	345.788
VAR:	1041078	409649	119569

Source: Comparative Bank Study, 1987

Table 6
PERSONNEL DISTRIBUTION

PCode*	Index	KBs		PDBs		RBs		Row Total	% Total	KBs	PDBs	RBs
		Number	%	Number	%	Number	%			%	%	%
1		0	0.00	5	1.98	12	4.38	17	1.57	0.00	29.41	70.59
2		0	0.00	5	1.98	10	3.65	15	1.38	0.00	33.33	66.67
3		0	0.00	20	7.91	50	18.25	70	6.45	0.00	28.57	71.43
4		0	0.00	5	1.98	12	4.38	17	1.57	0.00	29.41	70.59
5		24	4.30	16	6.32	16	5.84	56	5.16	42.86	28.57	28.57
6		17	3.05	5	1.98	4	1.46	26	2.40	65.38	19.23	15.38
7		27	4.84	15	5.93	30	10.95	72	6.64	37.50	20.83	41.67
8		17	3.05	18	7.11	20	7.30	55	5.07	30.91	32.73	36.36
9	L	5	0.90	6	2.37	6	2.19	17	1.57	29.41	35.29	35.29
10	F	121	21.68	33	13.04	12	4.38	166	15.30	72.89	19.88	7.23
11	F	28	5.02	1	0.40	2	0.73	31	2.86	90.32	3.23	6.45
12	F	63	11.29	21	8.30	16	5.84	100	9.22	63.00	21.00	16.00
13	F	24	4.30	9	3.56	0	0.00	33	3.04	72.73	27.27	0.00
14	L	20	3.58	16	6.32	21	7.66	57	5.25	35.09	28.07	36.84
15	L	12	2.15	13	5.14	14	5.11	39	3.59	30.77	33.33	35.90
16	L	0	0.00	1	0.40	14	5.11	15	1.38	0.00	6.67	93.33
17	F	11	1.97	3	1.19	0	0.00	14	1.29	78.57	21.43	0.00
18		2	0.36	1	0.40	5	1.82	8	0.74	25.00	12.50	62.50
19		178	31.90	48	18.97	19	6.93	245	22.58	72.65	19.59	7.76

Table 6, continuation

PCode*	Index	KBs		PDBs		RBs		Row Total	% Total	KBs	PDBs	RBs
		Number	%	Number	%	Number	%			%	%	%
20	L	2	0.36	4	1.58	5	1.82	11	1.01	18.18	36.36	45.45
21	L	0	0.00	5	1.98	4	1.46	9	0.83	0.00	55.56	44.44
22		0	0.00	0	0.00	1	0.36	1	0.09	0.00	0.00	100.00
23	L	0	0.00	1	0.40	0	0.00	1	0.09	0.00	100.0	0.00
24		1	0.18	2	0.79	1	0.36	4	0.37	25.00	50.00	25.00
25		6	1.08	0	0.00	0	0.00	6	0.55	100.00	0.00	0.00
26		0	0.00	0	0.00	0	0.00	0	0.00	0.00	0.00	0.00
TOTAL		558	100.00	253	100.00	274	100.00	1085	100.00			

AVG: 22 16 16

Note: F – strictly funds-related activities
 L – strictly loans-related activities

PCode* – see personnel classification code for description (Appendix 2).

Source: Comparative Bank Study, 1987.

comes from lending operations. RBs, on the other hand, have a greater bulk of their transaction cost in lending, 47.8 percent, against only 38.2 percent for their funds-mobilization activities. PDBs have almost the same transaction cost for their lending operations, 38.6 percent, and deposit mobilization activities, 36.8 percent. KBs being only a part of a nationwide bank network act as collecting stations by mobilizing and raising funds for their head offices (see Relampagos [1988]). Obviously, the emphasis is to generate as much funds from the public for their head offices. In contrast, RBs, being unit banks perform a fully dual operation of funds mobilization and lending operations with emphasis on the latter. Furthermore, RBs, more than KBs or PDBs rely more heavily on funds from the Central Bank's rediscounting window and from special lending programs. This is shown by a bigger percentage of KBs transaction cost coming from activities related to dealings with bank depositors and clients, 29.5 percent, against RBs 9.6 percent only. On the other hand, RBs have a higher percentage of their transaction cost in activities dealing with the CB, 6.7 percent, compared to KBs only 2.6 percent. PDBs like KBs, incur substantially more costs on deposit-mobilization from the public than on obtaining rediscounted funds from the Central Bank.

The above findings is further supported by the percentage of time-allocation of personnel of the different bank types between funds-mobilization and lending activities (Table 7). About 60 percent of total personnel time by KBs are devoted to funds- mobilization against only 15.6 percent for lending operations. In contrast, RBs have only 33.0 percent of total personnel time in funds-mobilization but 51.7 percent of total personnel time in lending operations. PDBs also have a greater portion of their personnel time allocated to funds-mobilization (40.5%) than to lending operations (33.8%).

In terms of personnel distribution (see Table 6), KBs have more of their total personnel in funds-mobilization activities, 44.2 percent, and only 7.0 percent in lending activities. But RBs have only 11.0 percent of their personnel involved in funds-mobilization activities against 23.4 percent of their personnel in lending operations.

In summary, RBs concentrate more on their lending activities compared to KBs. This is supported by RBs' personnel time allocation and distribution in favor of their lending operations. PDBs have a more balanced operations between funds-mobilization and lending operations as evidenced by their equal share in costs between these two operations. For KBs and PDBs, their lending operations and activities are shared with the head offices to the extent that they are given only a certain level of amount of authority in lending beyond which only their regional or head offices already assume the decision. RBs are unit banks performing both funds-mobilization and lending perhaps with a strong emphasis on

Table 7
PERSONNEL TIME-ALLOCATION
(percentage)

	ALL BANKS			KBs			PDBs			RBs		
	weighted shares	%gt	%st	weighted shares	%gt	%st	weighted shares	%gt	%st	weighted shares	%gt	%st
TOTAL LENDING:	721782.4	23.97	100	319797.8	15.57	100	175612.0	33.77	100	226372.5	51.74	100
Planning & Programming	58014.60	1.93	8.04	35884.83	1.75	11.22	9039.119	1.74	5.15	13090.65	2.99	5.78
Ads & Promo	19338.42	0.64	2.68	7661.925	0.37	2.40	5109.275	0.98	2.91	6567.229	1.50	2.90
Interview of Applicants	63890.10	2.12	8.85	28031.90	1.36	8.77	16099.04	3.10	9.17	19759.16	4.52	8.73
Credit Investigation	77240.63	2.56	10.70	29664.30	1.93	12.40	17723.77	3.41	10.09	19852.55	4.54	8.77
Evaluation & Analysis	82447.51	2.74	11.42	42042.92	2.05	13.15	11630.92	2.24	6.62	28773.67	6.58	12.71
Disbursement	43556.87	1.45	6.03	16341.57	0.80	5.11	12734.60	2.45	7.25	14480.68	3.31	6.40
Monitoring	39458.63	1.31	5.47	24621.50	1.20	7.70	7699.025	1.48	4.38	7138.100	1.63	3.15
Collection	61279.38	2.03	8.49	21683.13	1.06	6.78	21774.17	4.19	12.40	17822.07	4.07	7.87
Record-keeping/Report-writing	111525.2	3.70	15.45	44352.52	2.16	13.87	32107.63	6.17	18.28	35065.04	8.01	15.49
Mgt. of bad debts	50836.83	1.69	7.04	14132.47	0.69	4.42	16372.38	3.15	9.32	20331.97	4.65	8.98
Unspecified	114018.9	3.79	15.80	45379.00	2.21	14.19	25322.10	4.87	14.42	43317.86	9.90	19.14
INVESTMENTS	18661.81	0.62		330.115	0.16		7678.65	1.48		7644.049	1.75	
TRUST OPERATIONS	18372.64	0.61		13311.54	0.65		4787.55	0.92		273.5495	0.06	

Table 7, continuation

	ALL BANKS			KBs			PDBs			RBs		
	weighted shares	%gt	%st	weighted shares	%gt	%st	weighted shares	%gt	%st	weighted shares	%gt	%st
TOTAL FUNDS-												
MOBILIZATION	1577807.0	52.39	100	1222778.0	59.53	100	210675.1	40.51	100	144353.9	32.99	100
Transactions with CB,												
other banks	108687.6	3.61	6.89	70743.54	3.44	5.79	13858.79	2.66	6.58	24085.31	5.50	16.68
Transactions with												
Depositors	737788.3	24.50	46.76	607134.7	29.56	49.65	95340.32	18.33	45.25	35313.21	8.07	24.46
Record-keeping	371284.6	12.33	23.53	290563.4	14.15	23.76	53091.58	10.21	25.20	27629.61	6.31	19.14
Funds-Transfer	79859.79	2.65	5.06	65379.52	3.18	5.35	11850.43	2.28	5.62	2629.835	0.60	1.82
Ads & Promo	101347.4	3.37	6.42	75365.49	3.67	6.16	16769.72	3.22	7.96	9212.212	2.11	6.38
Unspecified	178568.3	5.93	11.32	113565	5.53	9.29	195119.62	3.75	9.27	45483.71	10.39	31.51
GENERAL ADMINISTRATION/ SERVICES	675014.1	22.41		494773.0	24.09		121330.5	23.33		58910.52	13.44	
Grand TOTAL	3011638	100		2053991.	100		520093.0	100		437554.5	100	

Note: gt – grand total

st – sub-total

Source: Comparative Bank Study, 1987.

the latter. This is explained by the role of RBs as conduits, and to some extent, PDBs, for the various special-lending programs of the Central Bank.

Transaction Cost of Lending

The transaction cost of lending for banks may be broken-down into two major components: loan processing cost and loan recovery cost. Considering the composition of the total lending costs (see Table 8) of the 49 banks in the sample about 41.3 percent of lending costs come mainly from loan recovery efforts such as monitoring of loans, collection, record-keeping and management of bad debts. Loan processing activities which includes interviews of credit applicants, credit investigation, evaluation and analysis and loan disbursement account for 30.5 percent of total lending costs.

By bank types, the contribution of loan processing activities to total lending cost is 28.5 percent for PDBs and 28.7 percent for RBs, noting almost no difference in their loan processing costs in relation to their total lending costs. On the other hand, about 32.7 percent of KBs' lending costs are accounted for by loan processing activities. This contrast indicates that KBs devote more resources to loan processing before approval and disbursement.

It is important to note, however, that despite RBs and PDBs having the same loan processing costs relative to their total lending cost, there is a difference in their costs arising from credit investigation and evaluation/analysis of loans. Compared to RBs, KBs and PDBs have their loan processing costs accounted more by credit investigation, 12.5 percent for KBs and 13.1 percent from PDBs, against only 8.0 percent for RBs (see Table 8). On the other hand, RBs give more emphasis to the evaluation/analysis of loans than PDBs.

Assuming that the characteristic of their borrowers may serve to explain the difference in credit investigation cost, a comparison of the number of loans granted to repeat borrowers was made. It is expected that a bank with more repeat borrowers would spend less on credit investigation cost since it is likely that the same borrowers would offer the same security. There is also the fact that the bank already knew other important characteristics of these borrowers.

Table 9 shows that on the average, KBs have 24 repeat borrowers per year, PDBs have 61, while RBs have a far greater average of 641. Of the 38 loan applications received by a KB, 24 or 63.1% were repeat borrowers. One notes that the RBs averaged 641 repeat borrowers, this number is 62 percent of 1,023 loan applications. Given the almost similar ratio of repeat borrowers to total applications, it can be said that the difference in credit

Table 8
LENDING COSTS
(in thousand pesos)

	ALL BANKS		KBs		PDBs		RBs	
	Pesos	%	Pesos	%	Pesos	%	Pesos	%
TOTAL LENDING COSTS:	20694.47	100.00	9503.33	100.00	5401.50	100.00	5789.64	100.00
Planning & Programming	1468.17	7.09	902.52	9.50	233.83	4.33	331.82	5.73
Ads & Promo	440.33	2.13	162.58	1.71	115.65	2.14	162.10	2.80
Disbursement	1054.60	5.10	412.11	4.34	286.98	5.31	355.51	6.14
Unspecified	2886.99	13.95	1128.10	11.87	677.85	12.55	1081.04	18.67
Loan Processing:								
Interview of Applicants	1646.16	7.95	693.84	7.30	446.38	8.26	505.94	8.74
Credit Investigation	2356.23	11.39	1186.04	12.48	709.32	13.13	460.87	7.96
Evaluation & Analysis	2305.38	11.14	1229.27	12.94	382.41	7.08	693.70	11.98
	6307.76	30.48	3109.15	32.72	1538.11	28.48	1660.50	28.68

Table 8, continuation

	ALL BANKS		KBs		PDBs		RBs	
	Pesos	%	Pesos	%	Pesos	%	Pesos	%
Loan Recovery:								
Monitoring	1054.95	5.10	641.08	6.75	212.43	3.93	201.44	3.48
Collection	1526.89	7.38	518.33	5.45	560.96	10.39	447.60	7.73
Record-keeping/ Report-writing	2886.19	13.95	1148.54	12.09	880.90	16.31	856.75	14.80
Mgt. of bad debts	3068.59	14.83	1480.91	15.58	894.79	16.57	692.89	11.97
	8536.63	41.25	3788.86	39.87	2549.08	47.19	2198.68	37.98

Source: Comparative Bank Study, 1987.

Table 9
NUMBER OF REPEAT BORROWERS

REPEAT BORROWERS	ALL BANKS		KBs		PDBs		RBs	
	Number	%	Number	%	Number	%	Number	%
0	3	6.82	2	11.11	0	0.00	1	7.69
50	26	59.09	15	83.33	11	84.62	0	0.00
100	2	4.55	1	5.56	0	0.00	1	7.69
150	1	2.27	0	0.00	0	0.00	1	7.69
200	2	4.55	0	0.00	2	15.38	0	0.00
250	0	0.00	0	0.00	0	0.00	0	0.00
300	0	0.00	0	0.00	0	0.00	0	0.00
300 +	10	22.73	0	0.00	0	0.00	10	76.92
TOTAL	44	100.00	18	100.00	13	100.00	13	100.00
AVG:			24		61		641	
SD:			47		113		465	
VAR:			2169		12744		215968	
MIN:			0					
MAX:			1590					

Source: Comparative Bank Study, 1987

**Table 10
LOAN APPLICATIONS**

No. of Loans	ALL BANKS		KBs		PDBs		RBs	
	Number	%	Number	%	Number	%	Number	%
100	31	58.49	19	90.48	11	73.33	1	5.88
300	5	9.43	2	9.52	3	20.00	0	0.00
500	4	7.55	0	0.00	0	0.00	4	23.53
700	2	3.77	0	0.00	1	6.67	1	5.88
900	2	3.77	0	0.00	0	0.00	2	11.76
1100	3	5.66	0	0.00	0	0.00	3	17.65
1300	1	1.89	0	0.00	0	0.00	1	5.88
1500	1	1.89	0	0.00	0	0.00	1	5.88
1500	4	7.55	0	0.00	0	0.00	4	23.53
TOTAL:	53	100.00	21	100.00	15	100.00	17	100.00
AVG:	382		38		161		1023	
SD:	530		57		187		507	
VAR:	280796		3274		34922		257477	
MIN:	4							
MAX:	1854							

Source: Comparative Bank Study, 1987

investigation cost between KBs and PDBs on one hand, and RBs on the other is not due to the frequency of repeat borrowers in the banks' portfolios.

Table 11 indicates that KBs and PDBs require higher loan-to-collateral ratios than RBs. The average loan amount is 61 percent of the collateral for KBs and 58 percent of the collateral for PDBs. RBs, on the other hand, give loan values of 57 percent, on average, of the collateral offered. The fact that KBs and PDBs have more commercial loans in their portfolio, usually of larger amounts than agricultural loans probably explain the importance of credit investigation, i.e., inspection and appraisal to ascertain the true value and authenticity of the collateral offered in these banks. As shown in Table 7, KBs and PDBs allocated a higher percentage of personnel time to credit investigation activities, 12.4 percent and 10.1 percent for KBs and PDBs, respectively, against only 8.8 percent for RBs.

Part of the credit investigation cost of loan processing is also accounted for by insurance premia paid by these banks to the special lending programs.¹ Table 12 shows that not a single RB has paid guarantee fees to these programs indicating that they have not participated in these programs or that they are not accredited at all. On the other hand, KBs and PDBs have paid guarantee fees from P20,000 to as high as P160,000. On average, PDBs pay P21,707 of guarantee fees while KBs pay P11,608. This guarantee fees contribute further to their credit investigation cost. Likewise, participation in these programs may require additional credit investigation work which would again partially contribute to the higher personnel cost in loan processing among KBs and PDBs compared to RBs.

Table 8 showed that the incidence of loan recovery costs in total lending costs is slightly higher for KBs (39.9%) and much higher for PDBs (47.2%) than for RBs (38.0%). Although rural banks service more loan accounts, yet smaller in loan value, than either PDBs or KBs, the higher loan recovery costs incurred by KBs and PDBs is due to the importance of loan recovery operations of these banks due to the larger exposure by KBs and PDBs to commercial loans than agricultural loans, the former loans being larger in amount. Among bank types, KBs and PDBs incur higher risk-related costs in managing their bad debts such as default expenses, litigation and provisions for bad debts. On the average, a KB incurs P46,665 in risk-related costs whereas a PDB and an RB incur about P18,682 and P12,759, respectively (see Table 13). The difference in cost may be due to the higher loan values for KBs and PDBs compared to RBs.

1. These were mostly fees to the crop insurance program.

Table 11
LOAN TO COLLATERAL RATIO

Loan as % of Collateral	ALL BANKS		KBs		PDBs		RBs	
	Number	%	Number	%	Number	%	Number	%
0	1	2.33	0	0.00	1	7.14	0	0.00
25% or less	1	2.33	0	0.00	1	7.14	0	0.00
50% or less	14	32.56	6	37.50	3	21.43	5	38.46
75% or less	22	51.16	8	50.00	6	42.86	8	61.54
100% or less	5	11.63	2	12.50	3	21.43	0	0.00
100+	0	0.00	0	0.00	0	0.00	0	0.00
TOTAL:	43	100.00	16	100.00	14	100.00	13	100.00
 AVG:	 59		 61		 58		 57	
SD:	20		16		26		15	

Source: Comparative Bank Study, 1987.

Table 12
GUARANTEE FEES
 (in thousand pesos)

Guarantee Fees	ALL BANKS		KBs		PDBs		RBs	
	Number	%	Number	%	Number	%	Number	%
0	43	81.13	11	64.71	10	71.43	22	100.00
20 & less	1	1.89	0	0.00	1	7.14	0	0.00
40 & less	5	9.43	4	23.53	1	7.14	0	0.00
60 & less	2	3.77	2	11.76	0	0.00	0	0.00
80 & less	0	0.00	0	0.00	0	0.00	0	0.00
100 & less	0	0.00	0	0.00	0	0.00	0	0.00
120 & less	0	0.00	0	0.00	0	0.00	0	0.00
140 & less	1	1.89	0	0.00	1	7.14	0	0.00
160 & less	1	1.89	0	0.00	1	7.14	0	0.00
TOTAL:	53	100.00	17	100.00	14	100.00	22	100.00
AVG:	9.457		11.608		21.707		0.000	
SD:	27.057		0.276		46.384		0.000	
VAR:	732.072		266.615		2151.444		0.000	

Source: Income and Expense Statements, Dec. 1986.

Table 13
RISK-RELATED EXPENSES
(in thousand pesos)

Provisions for Litigation & Bad Debts Expenses	ALL BANKS		KBs		PDBs		RBs	
	Number	%	Number	%	Number	%	Number	%
0	25	39.06	11	42.31	8	50.00	6	27.27
25 or less	23	35.94	7	26.92	4	25.00	12	54.55
50 or less	6	9.38	2	7.69	1	6.25	3	13.64
75 or less	3	4.69	1	3.85	1	6.25	1	4.55
100 or less	3	4.69	1	3.85	2	12.50	0	0.00
125 or less	0	0.00	0	0.00	0	0.00	0	0.00
150 or less	0	0.00	0	0.00	0	0.00	0	0.00
200 or less	0	0.00	0	0.00	0	0.00	0	0.00
225 or less	1	1.56	1	3.85	0	0.00	0	0.00
250 or less	2	3.13	2	7.69	0	0.00	0	0.00
TOTAL:	64	100.00	26	100.00	16	100.00	22	100.00
AVG:	27.577		46.665		18.682		12.759	
SD:	55.818		80.511		31.378		15.568	
VAR:	3115.663		6481.950		984.549		242.369	

Source: Income and Expense Statements, Dec. 1986.

Another possible explanation is that the higher loan recovery cost especially for PDBs may be dictated by the requirements of the guarantee programs for monitoring and report-writing. A higher percentage of loan recovery cost is attributed to record-keeping and report writing, and management of bad debts for both KBs and PDBs. PDBs incur the highest loan recovery costs relative to the total lending costs as they have more exposure to the guarantee programs among the three bank types. Further, the higher loan recovery cost among KBs and PDBs may be due to the dependence of the head offices on their branches for collection and management of loan accounts.

Transaction Cost of Funds-Mobilization

As shown in Table 14, a greater portion of funds-mobilization cost by all the banks comes from deposit-mobilization (47.7%) and from record-keeping and withdrawal (23.2%). Costs accounted by activities related to transactions with CB rediscounting are only 6.4 percent of funds-mobilization cost.

By bank types, KBs' and PDBs' funds-mobilization costs are accounted mainly by deposit-mobilization activities as transactions with bank depositors. KBs' deposit-mobilization cost accounts for 52.2 percent of funds-mobilization cost compared to 43.7 percent for PDBs. RBs, on the other hand, have only 25.1 percent of funds-mobilization cost coming from deposit-mobilization. A higher percentage of KBs' and PDBs' funds-mobilization cost is also due to record-keeping and withdrawal. This is to be expected since this cost is related to the servicing of deposits by clients.

RBs, on the other hand, have a higher percentage of their funds-mobilization cost from activities related to transactions with CB rediscounting window, 17.5 percent, against KBs' 4.6 percent and PDBs' 5.3 percent. This reflects the RBs' reliance on funds from CB, and highlights the fact that this reliance is far from costless. In fact, dependence from CB rediscounting window may represent an important cost for the banks.

It has been shown above that a greater percentage of personnel time is allocated to deposit-mobilization activities, 49.6 percent for KBs and 45.2 percent for PDBs compared to only 24.4 percent for RBs (Table 7). A greater proportion of personnel is also assigned to deposit-mobilization activities by KBs and PDBs compared to RBs (Table 6). This is explained by the greater volume of deposits serviced by both KBs and PDBs compared to RBs. Another factor is that KBs and PDBs have other accounts, such as time-deposits, to service unlike RBs. Overall, the concentration of personnel on deposit-mobilization activities by KBs and

Table 14
FUNDS-MOBILIZATION COSTS
(in thousand pesos)

	ALL BANKS		KBs		PDBs		RBs	
	Pesos	%	Pesos	%	Pesos	%	Pesos	%
Total	37010.20	100.00	27241.04	100.00	5146.205	100.00	4622.951	100.00
Transactions with CB, other banks	2335.823	6.31	1250.522	4.59	274.3954	5.33	810.9047	17.54
Transactions with Depositors	17636.44	47.65	14223.77	52.21	2250.752	43.74	1161.915	25.13
Record-keeping	8589.628	23.21	6443.389	23.65	1293.558	25.14	852.6812	18.44
Funds-Transfer	1529.688	4.13	1098.311	4.03	355.8993	6.92	75.47827	1.63
Ads & Promo	2250.033	6.08	1552.757	5.70	380.5763	7.40	316.6992	6.85
Unspecified	4663.796	12.60	2671.773	9.81	586.7502	11.40	1405.272	30.40

Source: Comparative Bank Study, 1987.

PDBs contribute to their higher deposit-mobilization costs. On the other hand, a greater percentage of personnel time is allocated by RBs to transaction cost with the CB, 16.7 percent against KBs and PDBs 3.44 and 2.44 percent respectively.

Fines and penalties related to reporting requirements with the CB and in meeting the reserve requirement contributed a greater percentage of RBs' funds-mobilization cost. On the average, this cost is P40,071 for RBs compared to KBs' P4,504 and PDBs' P6,757 (see Table 15). On the other hand, a considerable percentage of KBs and PDBs funds-mobilization cost comes from insurance for their deposits. This is expected since KBs and PDBs have a greater volume of deposits compared to RBs. The average is P66,468 for KBs, P15,514 for PDBs and P12,709 for RBs (see Table 16).

Per Unit Cost of Lending

Cost Per Loan Account Outstanding

Given the overall cost incurred by banks in their lending operations and considering the total number of outstanding loans in their portfolio, the cost per outstanding loan is about P1,380 per account (see Table 17). This amount represents the cost per loan by all the banks combined. Part of this cost per account comes from processing the new loans granted for the period considered and a bigger part comes from servicing these new loans in addition to other loans that are already outstanding.

By type of bank, RBs have the lowest cost per loan account, (P473) than PDBs (P1,839) and KBs (P14,500) (see Table 17). The big difference in cost per loan between KBs and RBs is that not only do KBs incur higher cost in their lending operations but that they have less accounts to service. In contrast, not only do RBs incur less total costs in the lending operations but they also service more accounts. This is typical among rural banks where most loans in their portfolio are small, but numerous. PDBs also have less number of accounts in their portfolio than RBs although greater than KBs. Most of the loans by RBs are agricultural loans compared to KBs which have predominantly commercial loans.

Recovery cost associated with all outstanding loans,² is P564 per account for all of the banks. For RBs the loan recovery cost per account is P166 against PDBs' P772 and KBs' P6,305. In all aspects of loan

2. Total loan recovery cost divided by the total number of loans outstanding.

Table 15
DEPOSIT-RELATED EXPENSES
(in thousand pesos)

Fines & Penalties	ALL BANKS		KBs		PDBs		RBs	
	Number	%	Number	%	Number	%	Number	%
0	24	43.64	10	52.63	11	78.57	3	13.64
20 & less	20	36.36	7	36.84	3	21.43	10	45.45
40 & less	2	3.64	1	5.26	0	0.00	1	4.55
60 & less	5	9.09	1	5.26	0	0.00	4	18.18
80 & less	1	1.82	0	0.00	0	0.00	1	4.55
100 & less	0	0.00	0	0.00	0	0.00	0	0.00
100 +	3	5.45	0	0.00	0	0.00	3	13.64
TOTAL	55	100.00	19	100.00	14	100.00	22	100.00
AVG:	17.849		4.504		6.757		40.071	
SD:	40.676		11.554		16.767		59.125	
VAR:	1654.575		133.500		281.117		3495.821	
MIN:	0							
MAX:	188.6							

Source: Income and Expense Statements, Dec. 1986.

Table 16
DEPOSIT-RELATED EXPENSES
(in thousand pesos)

Deposit Insurance	ALL BANKS		KBs		PDBs		RBs	
	Number	%	Number	%	Number	%	Number	%
0	1	1.85	0	0.00	1	7.14	0	0.00
20 & less	32	59.26	3	16.67	9	64.29	20	90.91
40 & less	10	18.52	4	22.22	4	28.57	2	9.09
60 & less	2	3.70	2	11.11	0	0.00	0	0.00
80 & less	4	7.41	4	22.22	0	0.00	0	0.00
100 & less	2	3.70	2	11.11	0	0.00	0	0.00
100 +	3	5.56	3	16.67	0	0.00	0	0.00
TOTAL	54	100.00	18	100.00	14	100.00	22	100.00

AVG:	31.356	66.468	15.514	12.709
SD:	36.826	45.490	11.216	6.277
VAR:	1356.141	2069.378	125.803	39.399

Source: income and Expense Statements, Dec. 1986

Table 17
COST PER OUTSTANDING LOAN ACCOUNT
(in pesos)

	ALL BANKS	KBs	PDBs	RBs
TOTAL LENDING COST:	1379.92	14500.28	1839.24	473.04
Planning & Programming	93.96	1136.09	99.79	29.02
Ads & Promo	30.54	201.34	58.71	13.59
Interview of Applicants	94.76	777.69	153.48	39.50
Credit Investigation	172.27	1894.99	291.96	39.45
Evaluation & Analysis	152.76	1821.55	81.36	67.47
Disbursement	72.78	681.54	123.60	23.88
Unspecified	198.56	1681.87	258.66	94.14
Loan Recovery:				
Monitoring	67.92	986.29	78.41	9.46
Collection	107.42	937.21	197.00	36.04
Record-keeping/ Report-writing	185.73	1724.72	328.37	58.80
Mgt. of bad debts	203.23	2656.98	167.91	61.69
	564.29	6305.20	771.69	165.99

Source: Comparative Bank Study, 1987.

recovery operations, i.e., monitoring, collection, record-keeping and management of bad debts, PDBs and KBs incur more costs than RBs (see Table 17). For example, the cost of monitoring each account is P78 for PDBs and P986 for KBs against P9.41 for RBs. It must be recalled that KBs and PDBs put more emphasis on their loan recovery operations due to greater exposure as a result of the larger commercial loans they make. Further, PDBs and KBs participate in the guarantee programs whereas RBs do not. The difference in their loan servicing cost per account may be due to the importance of loan recovery and the requirements of these guarantee programs for supervision and stricter management of these accounts compared to regular accounts.

Table 18 reports the average cost per loan granted during the year.³ It is shown that PDBs and KBs have higher processing cost per loan at P1,023 and P6,745 respectively, against RBs' P120. As in the banks' loan recovery cost, all aspects of loan processing cost from screening to credit investigation and loan evaluation is higher among PDBs and KBs compared to RBs. An example would be the credit investigation cost per account for loan processing activities than RBs. This may be partly due to the need for extensive credit investigation and partly due to the participation of PDBs and KBs in guarantee programs.

Cost Per Peso Lent

As regards the cost per peso of loan granted and loans outstanding for these banks, a totally different picture emerges. Considering all the banks, the cost per peso loan outstanding is P0.03 (see Table 19). This means that the cost of maintaining each peso of loan outstanding is about three centavos. For each bank type, this cost is P0.06 for RBs, P0.03 for PDBs and P0.02 for KBs. Overall, KBs and PDBs have the comparative advantage in lending compared to RBs as they are able to keep a lower cost per peso of loan they keep in their portfolios. This is a direct effect of the larger amounts of outstanding loans, in KBs' and PDBs' portfolio than in RBs. What PDBs and KBs lack in the number of loan accounts, they make it up by a higher loan amount per account.

The cost of recovering each peso of loan outstanding⁴ for each bank is P0.023 for RBs, P0.014 for PDBs and very negligible for KBs, P0.008 (see Table 19). Again, the slightly lower loan recovery cost per peso for

3. Total loan processing cost divided by total number of loans granted.

4. Total loan recovery cost divided by the total value of loans outstanding.

Table 18
COST PER LOAN
(in pesos)

	ALL BANKS	KBs	PDBs	RBs
TOTAL LENDING COST:	1237.30	20176.99	3593.81	391.02
Planning & Programming	71.87	1355.49	155.57	23.19
Ads & Promo	25.62	283.70	76.95	11.90
Disbursement	68.88	998.83	190.94	26.60
Monitoring	64.87	1526.13	141.34	11.59
Collection	95.79	1238.90	373.23	29.30
Record-keeping/ Report-writing	178.41	2540.00	586.09	59.90
Mgt. of bad debts	192.35	3440.20	595.34	47.36
Unspecified	152.75	2049.01	451.00	60.92
Loan Processing:				
Interview of Applicants	103.83	1583.50	296.99	36.68
Credit Investigation	142.88	2543.67	471.93	32.15
Evaluation & Analysis	140.04	2617.58	254.43	51.44
	386.75	6744.74	1023.36	120.27

Source: Comparative Bank Study, 1987.

Table 19
COST PER PESOS LOAN OUTSTANDING
(in pesos)

	ALL BANKS	KBs	PDBs	RBs
TOTAL LENDING COST:	0.026	0.018	0.030	0.060
Planning & Programming	0.002	0.001	0.001	0.003
Ads & Promo	0.001	0.000	0.001	0.002
Interview of Applicants	0.002	0.001	0.002	0.005
Credit Investigation	0.003	0.002	0.004	0.005
Evaluation & Analysis	0.003	0.002	0.002	0.007
Disbursement	0.001	0.001	0.002	0.004
Unspecified	0.004	0.002	0.004	0.011
 Loan Recovery:				
Monitoring	0.001	0.001	0.001	0.002
Collection	0.002	0.001	0.003	0.005
Record-keeping/ Report-writing	0.004	0.002	0.005	0.009
Mgt. of bad debts	0.004	0.003	0.005	0.007
	0.011	0.008	0.014	0.023

Source: Comparative Bank Study, 1987.

KBs and PDBs compared to RBs is dictated by the bigger volume of loans they service.

As regards the cost of granting per peso of loan,⁵ the differences across banks do not appear significant. This amounts to P0.013 for RBs, P0.015 for PDBs and P0.015 for KBs (see Table 20). Among the sample banks, RBs granted more loans in value than PDBs given their respective costs which explains the slightly lower per peso cost of granting a loan. On the other hand, slightly higher cost per peso of granting a loan of KBs compared to RBs is due to the fact that although KBs granted a higher total value of loans than RBs, KBs incurred higher cost of loan processing compared to RBs. Overall they do not differ in their cost per peso lent. This is an important finding, since it suggests that current RB operations are of similar efficiency, measured by costs per peso lent, compared to KBs and PDBs.

Per Unit Cost of Deposit-Mobilization

Cost Per Deposit Account

Considering all the banks, their overall cost of mobilizing each deposit account, i.e., opening of new accounts to servicing each account, is P87 (see Table 21).

Most of the cost in mobilizing each deposit account from the public is due to activities directly related to transactions with bank clients or depositors, amounting to P52 per deposit account. Likewise, this deposit-mobilization cost is largely accounted for by record-keeping and withdrawal.

By type of bank, the cost of mobilizing each deposit account is higher for KBs and PDBs (P120 and P73, respectively) compared to RBs (P29). The higher cost per deposit for KBs comes from their higher cost in deposit-mobilization relative to the number of deposits attracted.

Much of this cost of mobilizing deposit accounts for all the three bank types come from activities related to servicing new depositors or clients and to keeping each depositor's account with the bank. Servicing each bank depositor includes the opening of new accounts by new clients to over-the-counter transactions with depositors, i.e., withdrawal. Maintaining each account involves record-keeping. For all banks, KBs have an over-the-counter transactions cost of P76 per account and a record-keeping cost of P30. PDBs have the second highest cost with P37 and

5. Total loan processing divided by the total value of loan granted.

Table 20
COST PER PESO LENT
(in pesos)

	ALL BANKS	KBs	PDBs	RBs
TOTAL LENDING COST:	0.046	0.043	0.053	0.043
Planning & Programming	0.003	0.003	0.002	0.003
Ads & Promo	0.001	0.001	0.001	0.001
Disbursement	0.003	0.002	0.003	0.003
Monitoring	0.002	0.003	0.002	0.001
Collection	0.004	0.003	0.006	0.003
Record-keeping/ Report-writing	0.007	0.005	0.009	0.007
Mgt. of bad debts	0.007	0.007	0.009	0.005
Unspecified	0.006	0.004	0.007	0.007
Loan Processing:				
Interview of Applicants	0.004	0.003	0.004	0.004
Credit Investigation	0.005	0.005	0.007	0.004
Evaluation & Analysis	0.005	0.006	0.004	0.006
	0.014	0.015	0.015	0.013

Source: Comparative Bank Study, 1987

Table 21
COST PER DEPOSIT ACCOUNT
 (in pesos)

	ALL BANKS	KBs	PDBs	RBs
Total Deposit- Mobilization Cost	87.47	120.41	73.21	28.94
Transactions with Depositors	52.25	75.63	36.71	13.97
Record-keeping	23.49	30.16	22.92	10.25
Funds-Transfer	4.49	5.65	6.50	0.91
Ads & Promo	7.23	8.97	7.01	3.81

Source: Comparative Bank Study, 1987.

Table 22
COST PER PESO DEPOSIT
 (in pesos)

	ALL BANKS	KBs	PDBs	RBs
Total Deposit- Mobilization Cost	0.021	0.018	0.023	0.035
Transactions with Depositors	0.012	0.011	0.011	0.017
Record-keeping	0.006	0.005	0.008	0.012
Funds-Transfer	0.001	0.001	0.002	0.001
Ads & Promo	0.002	0.001	0.002	0.005

Source: Comparative Bank Study, 1987.

P23 respectively, for over-the-counter transactions with depositors and record-keeping, respectively, RBs have P14 and P10 per account for these deposit-mobilization activities.

Costs Per Peso Mobilized

In contrast, the cost of mobilizing per peso of deposit is lowest for KBs (P0.018 per peso), followed by PDBs (P0.023) and RBs (P0.035) (see Table 22). This means that for KBs, the cost of mobilizing each peso of deposit is 1.8 centavos against PDBs 2.3 centavos and RBs 3.4 centavos.

This again shows KBs' comparative advantage in raising a peso of deposit. This can be explained by the larger deposit balances per account in KBs, although they have smaller number of deposit accounts. Normally, this is expected of KBs which are situated in more prominent locations, such as in relatively well-off communities. In addition, most KBs hold commercial accounts from businesses. PDBs, likewise, have the same advantage over RBs which have more deposit accounts than PDBs although small in value.

Summary and Conclusion

The following are the major findings of this study:

1. Funds mobilization activities account for a greater part of total transaction cost among all banks than lending operations. KBs have a larger portion of their transaction cost contributed by funds-mobilization than their lending operations while the opposite is true for RBs. This emphasizes the fact that KB branches are funds-generating units while RBs are more lending oriented. PDBs have a balanced operation on both funds-mobilization and lending.
2. Considering banks' transaction cost on lending, KBs have a higher percentage of their lending cost accounted for by loan processing compared to PDBs and RBs. This may be due to more intensive credit investigation of collateral offered among KBs. Besides granting smaller amounts per loan, RBs are more familiar with their clientele of small borrowers having only to serve a small service area of borrowers.

Loan recovery cost also accounts for a greater share of lending cost among KBs and PDBs. This is due to intensive loan recovery efforts by these banks as a result of their higher ex-

posure given the predominance of commercial loans in their portfolio.

3. As regards transaction cost on funds-mobilization, a greater part is spent on deposit-mobilization activities specially among KBs and PDBs. On the other hand, a greater portion of RBs funds-mobilization cost come from mobilizing funds from the CB rediscounting window. This cost is shown to be a substantial component of RBs funds-mobilization cost.
4. The cost per outstanding loan is lowest for RBs and highest for KBs. But the cost per peso of outstanding loan is lowest for KBs and highest for RBs. The cost of granting a loan is lowest for RBs than either PDBs or KBs. The per peso cost of granting a loan, is also lowest for RBs than PDBs or KBs, although the differences among the banks is not significant.
5. The cost of mobilizing each peso of deposit account is higher for KBs and PDBs compared to RBs. In contrast, KBs obtain the lowest cost of mobilizing per peso of deposit, followed by PDBs than RBs. This may again be attributed to the higher volume of deposits mobilized by both KBs and PDBs.

The contrast in the composition of transaction cost among the different bank types particularly KBs and RBs serves to distinguish the direction of their operations. Being only a part of a larger branch network, KB branches serve as deposit-mobilizing units for their head offices. Thus, this is shown by the larger portion of their transaction cost in funds-mobilization. On the other hand, RBs which are unit banks can only expect to serve a limited clientele with less incentive to raise funds from deposits but more inclined to source funds from CB. As channel for such funds their emphasis is on lending. But despite the stark contrast of emphasis in their operations, the fact remains that KBs and PDBs with larger operations hold a comparative advantage in either funds-mobilization and lending operations measured by per peso cost of delivery.

Primarily, the problem addressed is the viability of rural financial intermediaries in terms of lower transaction cost most specifically the per unit cost of bringing bank services to the rural sector. The fact that KBs and PDBs have relatively lower cost per peso of loan and cost per peso deposit mobilized than RBs indicates their comparative advantage in both funds-mobilization and lending activities. But this does not mean that smaller banks which carry predominantly agricultural loans in their portfolio need go into large scale lending in order to reduce their per peso cost. In fact, the results of a related study (see Untalan 1988) reveal that

agricultural lending is not a significant determinant of bank transaction cost. The extent and leeway of operations of banks serve as significant factors in the delivery cost per unit for these services as evidenced by the findings of the study on the existence of economies of scale.

Additional capitalization requirements for smaller banks especially among unit banks, would permit these small rural financial intermediaries to expand their operations and improve their performance and viability by exploiting economies of scale in their operations. Bigger operating capacity for smaller banks would lower their transaction cost and thus effectively lower their average cost of delivery. One way by which these banks could increase their capital base is the removal of the present 25 percent limit on capital subscriptions.

Liberal bank entry will, likewise, prove to be beneficial in reducing transaction cost in the long-run since competition would force rural intermediaries to produce these bank services at the lowest possible cost in order to remain profitable. Perhaps the higher per unit cost among RBs may be due to the lack of incentives to minimize costs in the absence of competition. Likewise, free bank entry would provide these banks a chance to expand their operations. Wider operations for unit banks like RBs provide additional incentives for expanded lending in terms of the number of loans by serving other areas. These will also serve to strengthen their deposit-mobilization activities and effectively lower their funds mobilization cost while correcting their status as mere conduits of funds. A higher volume of deposits of the same cost could lower the cost per peso of deposit. In other words, banks, when provided incentives to expand their operations can improve their performance by taking advantage of the presence of economies of scale.

Perhaps, the profitability and viability of rural financial intermediaries can also be directly addressed by looking into factors affecting bank transaction cost. One way of lowering transaction cost is through improvements in farm productivity. This directly lowers the risk faced by banks. It is common knowledge that this risk comes from the beneficiaries of credit in this case the rural households in the form of lower repaying capacity.

Improvements in infrastructure such as farm to market roads, irrigation, availability of better farm inputs and equipment, better education to farmers of modern techniques of farming, marketing assistance, and appropriate pricing policies will go a long way in increasing farm productivity and improving the incomes of rural households. These reduce risk-related costs of rural financial intermediaries, and thus their transaction cost.

Further, improvement of rural household income would "monetize" an otherwise dormant sector of the economy thus giving incentives for these

households to seek more credit which can be translated not only in terms of the increased number of loans by the banks but an increase in the size of the loan as well. Both have decreasing effects in the per unit and per peso cost of delivery for these rural financial intermediaries.

Appendix 1

A. LENDING OPERATIONS:

1. Planning and Programming (e.g. setting-up of loan targets/ programs)
2. Advertising and Promotions
3. Interview of Credit Applicants/Examination of Loan Applications
4. Credit Investigation (e.g. inspection/appraisal of collateral; examination of bank)
5. Evaluation/Analysis and Approval of Loans
6. Disbursement of Loan
7. Monitoring of Loans Including Technical Assistance
8. Collection of Loans
9. Record-keeping and Report-writing
10. Management of Bad Debts

B. INVESTMENTS

C. TRUST OPERATIONS

D. FUNDS-MOBILIZATION:

1. Transactions with the Central Bank/other banks
2. Transactions with Bank Depositors
3. Record-keeping and Withdrawal
4. Funds-Transfer Operations
5. Advertising and Promotions

E. GENERAL ADMINISTRATION/SERVICES

(e.g. typing, delivery/messengerial activities, maintenance/utility)

Appendix 2

Personnel Classification Code

<i>Code</i>	<i>Bank Personnel/Positions</i>
1	Chairman
2	Vice-Chairman
3	Directors/President
4	Board Secretary/Treasurer
5	Manager/President-Manager
6	Assistant Manager/Branch Operations Manager/ Branch Operations Officer
7	Cashier/Assistant Cashier/Cash Clerk
8	Branch Accountant/Accountant/General Bookkeeper/ Assistant General Bookkeeper
9	Loans Officer/Account Officer/Credit Administrator
10	Senior Teller/Head Teller/General Teller/PR Teller/Field Teller New Accounts/ Savings Pro/Customer Relations Assistant
11	FX Clerk/CTD Clerk/Sundries Clerk
12	CA Bookkeeper/SA Bookkeeper/ Supervising Bookkeeper/Junior or Senior Bookkeeper/Liability Bookkeeper/ CTD Bookkeeper/Posting Clerk/ Proofsheet/Accounting Clerk (Funds)
13	Clearing Clerk/Batching Clerk/ Distributing Clerk
14	Loans Analyst/Loan Processor/ Loan Clerk/Credit Investigator/ Credit Analyst/Financial Analyst/ Clerk/Loans-Rediscount Clerk
15	Loans bookkeeper/Accounting Clerk(Loans)/Subsidiary-ledger Bookkeeper/Filing Clerk
16	Inspector/Technician/Farm or Credit Technician/Production Technician
17	Settling Clerk/Branch Courier/Messenger/ Utility Clerk

18	Secretary/Clerk Typist
19	Driver/Janitor/Messenger/Security Guards
20	Appraiser/Costing Clerk
21	Collector
22	Property-Liaison Clerk
23	Acquired Asset Administrator
24	Administrative Assistant/Personnel Pro
25	Money Shop Manager/Money Shop Supervisor

Appendix 3

A. Where the personnel/position differs by name but having more or less similar functions, these are grouped together as one classification and assigned one variable.

ex. 1 Senior Teller, Head Teller, General Teller

ex. 2 Loans Analyst, Loans processor, Loans Clerk

B. Where the personnel/position differ slightly in functions but can be categorized as one general office function or activity these are assigned one variable, i.e. deposit-taking, these are grouped together in one classification.

ex. 1. Senior Teller, Field Teller, New Account Clerk, Savings Personnel

ex. 2. Inspector, Farm Technician, Credit Technician, Production Technician

ex. 3. Current Account Bookkeeper, Savings Account Bookkeeper, Certificate of Time Deposit Bookkeeper, Posting Clerk (Savings)

C. For personnel/positions that belong to the same classification as to deposit-taking or lending, but differ in rank, i.e. officer-positions vs. rank and file, these are assigned one variable.

- ex. Branch Accountant, Accountant, General Bookkeeper, Assistant General Bookkeeper (8) vs. C.A. Bookkeeper, S.A. Bookkeeper, Supervising Bookkeeper, Jr. and Sr. Bookkeeper, Accounting Clerk (Deposit).
- D. For positions that have general descriptions but involving completely different office function on activity, segregation is made by noting the % of their time devoted to the major functions i.e. deposits or lending.
- ex Accounting Clerk (Deposit-taking)
Accounting Clerk (lending operations)
- E. Other positions which are distinctly attributed to a particular bank are assigned separate variables to avoid arbitrary lumping or classification.
- ex. PCIB Money Shop Manager/PCIB Money Shop Supervisor

The above insures that the grouping of personnel performing similar or slightly different office activities belong to the same major office functions activity as required in the time allocation table (A) Lending, (B) Investment (C) Deposit-taking, (E) General Administrative. The above guidelines were based on job descriptions of each personnel and/or by noting the amount of time allocated to each of the major office function, (A) - (E).

Majority of the banks surveyed do not have a complete matching of time-allocation of each personnel against the corresponding compensation of such personnel. In order that whatever existing information on these banks can be used, values for these missing data were generated and the following guidelines were followed:

- A. Positions with no compensation but with time-allocation
1. RBs — averaging all compensation for that particular positions across all RBs and taking into consideration that the resulting compensation is within the salary range for the bank in question i.e. the computed compensation for teller of RB1 must

not be higher than the compensation of the cashier of the same bank. Otherwise, re-calculation is made by deleting the highest compensation value in the sample until the computed compensation is within RB1 salary range.

2. KBs/PDBs — averaging all compensation for that particular position using only existing values of branches of that bank under consideration i.e. teller position BPI San Pablo generated using compensation of other teller positions of other BPI branches.

B. Positions with no time-allocation but with compensation

1. RBs — averaging time-allocation of that particular positions across all RBs, i.e. time allocation of manager is computed by averaging all time allocation for managers by all RBs.
2. KBs/PDBs — averaging all time-allocation for that particular position using time-allocation of personnel from other branches of the same bank.

C. Officer Positions with no time-allocation

1. RBs — for positions of Chairman, Vice- Chairman, Board Members that have no time allocation, values are given using equal time allocation of 50 percent for lending and 50 percent for deposit- mobilization.

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