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INVESTMENT THEORY AS APPLIED TO PHILIPPINE RURAL BANKING

by

Edita A. Tan

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INVESTMENT THEORY AS APPLIED TO PHILIPPINE RURAL BANKING

In the early 1950's there were only around 100 banks in the Philippines. Most of these were located in Manila, so that credit facilities were not readily accessible to small farmers, merchants and fishermen. The Rural Bank Law (R.A. No. 720) was enacted to provide better credit facilities to these borrowers.

The objective of the law as stated in Section 3 was "to encourage and assist in the establishment and operation of rural banks for the purpose of providing adequate credit facilities to small farmers and merchants, or to cooperatives of such farmers or merchants, and to supervise the operation of such banks ".

To achieve this objective, Section 7 of the said law stipulated the provision of "supplemental capital to any Rural Bank until it has accumulated enough capital of its own or stimulate private investment in Rural Banks. The Rehabilitation Finance Corporation[1] shall, upon certification of the Monetary Board which shall be final, of the existence of such need, subscribe within 30 days to the capital stock of any Rural Bank from time to time in an amount equal to, but not exceeding the total equity investment of the private shareholders."

In addition to this fairly large capital assistance, the Central Bank grants them a cheap source of funds through its discount window. We see from the following Table — the rate of discount for rural banks [illegible] is very low [illegible] relative to discount rates charged commercial banks and relative to bank loan rates.

1/ Capital and other assistance to rural banks are now directly obtained from the Central Bank.

TABLE I

DISCOUNT RATES FOR COMMERCIAL AND RURAL BANKS

Y E A R	BASIC RATE FOR COMMERCIAL BANKS	FOR RURAL BANKS			
		In Operation for not more than 2 years	In operation from 2-3 years	In operation from 3-5 years	In operation for more than 5 years
1952	2%		0.5%	.5%	.5%
1954	1½%		"	"	"
1957	2% 4½%		"	"	"
1959	6½%		"	"	"
1960	6% 5 3/4% 5%		"	"	"
1961	5% 3%		"	"	"
1962 1963	6% 6%		0.5%	1½%	2½%
1966	4 3/4%	2%	3%	3%	3.%
1967	6%	"	"	"	"
1968	7½%	"	"	"	"
1969	8%	"	"	"	"
1971	8%	"	"	"	"

Source: CB Annual Reports

* Two per cent for rural banks in operation for <u>not</u> more than two years as of the date of the loan application; three per cent for those in operation for more than two years as of the date of the loan application.

In addition, special funds of the Central Bank such as the AID-CB guarantee loan fund is coursed through rural banks. However, rural banks are covered by the same interest ceiling on loans and deposits.

We can apply a basic investment criterion to rural bank behavior given the three control measures used - preferential rate of discount, interest ceiling on loans, and interest ceiling on deposits. We refer in particular, to Hirschleifer's 1958 article on Theory of Optimal Investment Decision."[2]

It would seem that these incentives are granted to rural banks so that they will be encouraged to expand in number and size. Cheap credit granted to them are assumed to be channeled to small farmers and fishermen and their accessibility is taken to encourage the institutionalization of savings.

This paper analyzes the possible response of rural banks to the incentives and other control instruments and see their consistency with the set objectives. We will analyze two major control instruments regulations on rate of interest and discounting privileges.

We can simply borrow Hirschleifer's figure 3 and show what will be the optimal borrowing, landing, and investment behavior.

In his figure 3, we can assume that the banker has his own investment opportunity curve QQ'. He faces three financial opportunities- borrow from the Central Bank at discount rates of 3 per cent; lend at 12 per cent, borrow from other banks at 12 per cent.

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[2] Journal of Political Economy

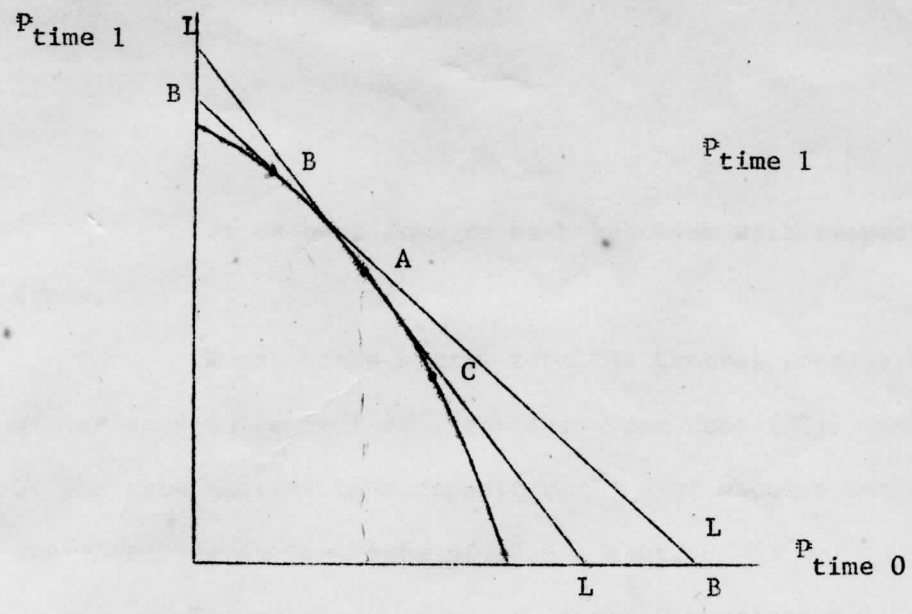

CHART 1 - Investment, Lending Behavior

His optimal point is A where lending rate is equal to the marginal internal rate. Though it is profitable for him to invest up to point B where his borrowing rate from the Central Bank is equal to his marginal rate of return, since the lending rate is higher, his profits are maximized by lending than by investing. Bank funds are allocated to the bankers' direct investment and to other producers at the point where their marginal internal rate is equal to the borrowing rate. In a competitive situation there is no problem of allocation since the lending rate will tend to equal the marginal cost of funds and the marginal rate of return.

Some misallocation and several distributional problems may arise in the case where a legal ceiling on loan rate is operative, that is where banks have to ration credit. Point A will not be socially optimal since the banker will ration credit to his investments more favorably than to his clients. The optimal point of the bank will still be at A. But if credit is rationed at the lending rate of 12 per cent, some borrowers may obtain an amount of credit below their optimal point, say C, on Chart 1.

The distributional implications are quite obvious and we will see further on that the gains from generous discounting to rural banks adds to the gains from credit rationing.

Let us next analyze bank behavior with respect to source of funds.

Rural banks borrow from the Central Bank up to the value of its paid-in capital at about three per cent (3%). They are covered by the same Central Bank deposit ceiling of about 6 per cent, and Anti-Usury ceiling on loan rate of 12 per cent.

The supply of funds from the Central Bank is drawn as F^S_{CB}; the supply of funds from deposit is $F^S_{deposit}$ and its corresponding marginal cost curve of $F^S_{deposit}$ is $MC_{deposit}$. The bank's operating marginal cost curve is MC_o. The supply curve of funds is $MC_o + MC_{deposit\ of\ CB}$. Assuming that the demand curve for funds at the ceiling rate of 12% is DD, equilibrium loans and funds obtained by the bank is at level F_e. The funds are obtained as follows: F_{CB} from the Central Bank and $F_e - F_{CB}$ from deposits.

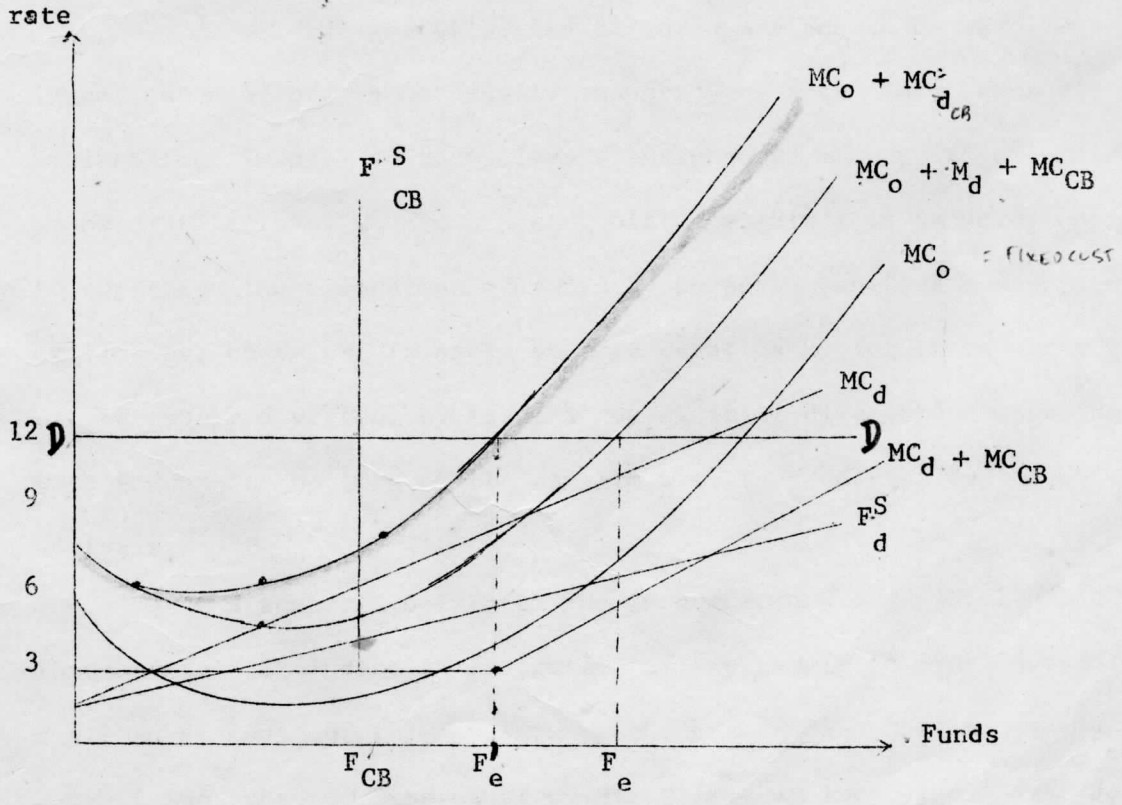

Chart 2

If there is no discounting privilege, the supply curve will be to the left of the supply curve with discounting privilege. The banks will lend at F'_e. This is at a lower level of bank loans but at a higher level of deposits. Savers would have ~~earned a higher rate of interest on deposits and~~ channeled more funds into the banking system.

The above graph unintentionally depicts the actual proportions of funds coming from the Central Bank and from depositors. We find in Table 1 a more or less similar distribution of sources of rural bank funds as in the chart. Very large proportion of funds come from the Central Bank. For most of the years, the ratio of Central Bank loans to deposits of rural banks is usually greater than unity. We can expect banks to continue using Central Bank discount window as long as a differential exists for discount and deposit rate. This control instrument is not consistent with the objectives of the law.

How funds are allocated to borrowers and to bankers' own investment projects is not easily supported by data since banks are prohibited from lending to themselves. But when we make profitable violations of this rule, we can expect violations. Since it is not practical to supervise the allocation of funds by purpose - whether for farming or fishing, cheap credit assistance to rural banks for these activities can be easily diverted. A closer study of inter-directorate of bankers with industries would probably confirm what is predicted by the above analysis.

The analycis points to the inconsistency of objective and control instruments. If indeed the objective of the Law is to provide credit to small rural businessmen, subsidizing the banker does not seem to be the correct instrument. Other instruments which may involve direct investment

in irrigation, feeder roads, information through mass media and outright distribution of variable inputs for high yielding crops may better achieve the objective. There is no difference really between directly subsidizing the banker and the proposed subsidy to farmers. Central Bank lending to banks at 3 per cent is as much a direct bounty as distribution of seeds.

On the other hand the control instruments for rural banks can easily be withdrawn. If the rural banks which were established because of the incentives remain in operation after the withdrawal of subsidy, the Law would have accomplished a lot. Banking services would have become available because of the Law. (of controls) w/o

Table 2

SELECTED ACCOUNTS OF RURAL BANKS TABLE VI-I

(In Millions of Pesos)

mber of ral Banks	Out-standing loans	Loans Granted by Rural Bank	CB loans Granted to RB	Depo-sits	Loan out-stand-ing of CB to RB	Out-stand-ing Loans	Loans Grant-ed by RB	Rate of Growth: CB loans granted to RB	Rate of Growth: Depo-sits	RATIOS 2/1	RATIOS 3/5	RATIOS 3/2	RATIOS 4/1	RATIOS 3/4
18	1.9	2.7	-	.002						1.4	-	-	.001	-
26	3.8	4.6	-	.2	-	94.2	65.4	-	-	1.2	-	-	.06	-
38	6.5	6.7	.1	.7	-	69.8	45.2	-	182.2	1.0	-	.01	.10	.1
75	15.3	18.7	2.9	2.2	2.2	136.3	171.8	2800	212.6	1.2	1.3	.2	.1	1.3
106	28.2	35.9	7.6	6.7	5.2	83.5	96.6	162	202.3	1.3	1.5	.2	.2	1.1
120	40.8	51.1	14.2	11.2	9.9	44.7	42.4	86.8	65.9	1.2	1.4	.3	.3	1.3
135	48.1	61.6	14.0	18.1	8.7	17.9	20.5	1.4	61.7	1.3	1.6	.2	.4	.8
160	58.5	71.2	16.7	24.6	10.3	21.5	15.5	19.2	36.2	1.2	1.6	.2	.4	.7
181	82.3	100.3	29.3	33.8	18.4	40.8	40.8	75.4	37.1	1.2	1.6	.3	.4	.9
224	109.9	130.9	45.7	41.2	29.1	33.4	30.5	55.9	22.0	1.2	1.6	.3	.4	1.1
252	145.5	178.7	67.6	54.9	42.6	32.4	36.5	47.9	33.1	1.2	1.6	.4	.4	1.2
283	201.4	245.8	103.7	64.7	70.5	38.4	37.5	53.4	17.7	1.2	1.5	.4	.3	1.6
309	221.6	261.0	108.5	78.7	69.3	10.0	6.0	4.6	21.6	1.2	1.6	.4	.4	1.4
338	261.0	295.5	113.8	100.8	73.4	17.7	13.1	4.8	28.0	1.1	1.6	.4	.4	1.1
369	333.0	389.1	133.8	141.8	86.8	27.5	31.6	17.5	40.7	1.2	1.5	.3	.4	.9
411	390.0	433.8	140.0	167.9	101.2	17.1	11.4	4.6	18.3	1.1	1.4	.3	.4	.8
452	447.9	472.2	172.2	201.6	133.5	14.8	8.8	23.	20.0	1.0	1.3	.4	.4	.9

anking System Annual Reports