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**INDIAN INSTITUTE OF MANAGEMENT
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SOME ISSUES FOR CONSIDERATION

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Introduction

The increase in size and complexity of large organizations makes it impossible for a single group of executives at the central office to effectively take all operating decisions. Decision making authority has to be delegated or in other words, the organization has to decentralise.¹ This is so because as the organizations grow larger, the span of operations under an executive becomes large and he is not in a position to assimilate and process the relevant information fast enough to take timely decisions. In the words of Alfred Chandler:

The lack of time, of information and of psychological commitment to an overall entrepreneurial viewpoint were not necessarily serious handicaps if the company's basic activities remained stablebut when further expansion into new functions, new geographical areas.... greatly increased all types of administrative decisions, then the executives in the central office became overworked and less efficient. These increasing pressures, in turn, created the need for building or adopting of the multi-divisional structure with its general office and autonomous operating divisions.²

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¹ D. Solomon, Divisional Performance Measurement and Control, Irwin, 1965, pp.3-5.

² A.D. Chandler Jr Strategy and Structure: Chapters in the History of the Industrial Enterprise, The MIT Press, Cambridge, 1962, p.297.

The concept of decentralization has spread so rapidly that it is rare to find a large organisation which has not decentralised in one form or the other. Decentralisation, in addition to relieving the load on the central office executives, also has the following advantages:

- a) It serves as valuable training for the development of future leaders.
- b) It motivates lower level managers to perform better as they will be able to see the results of their decisions.

Thus in large organizations the question to be asked is not whether it should decentralise but how much?

Need for Control

The decision to decentralise however brings with it the need for management control. One of the crucial functions of top management today is to evaluate the performance of the various divisions³ and to ensure that they are taking decisions in line with the overall corporate objectives and goals. This involves setting up and communication of targets to the divisions; measuring the actual performance of the divisions against these targets and taking suitable corrective actions, wherever necessary.

In this paper we will look at some issues relating to management control in banks. Specifically, we will address the following issues:

- a) Should branches be treated as 'profit centres' i.e., evaluated on the profits they make?

³We will henceforth refer to a decentralized unit as a division.

- b) What should be the interest rate charged on funds transferred to the central office by deposit - heavy branches and funds borrowed from the central office by loan-heavy branches?

Here we will examine the current practices and develop a framework to evolve a suitable transfer pricing system.

Growth in the Banking Sector and the Need to Decentralise:

After the nationalisation of the 14 major commercial banks, the banking sector in our country has registered a phenomenal growth rate. In addition, the banks have also diversified their activities vastly increasing the complexities in their operations. The table below lists some indicators of the growth in the banking sector.

Table 1

GROWTH IN THE BANKING SECTOR

Measures	1969	1977	1978
Deposits (Rs. crores)	5173	22434	26432*
Advances (Rs. crores)	3729	14944	17822*
Number of branches	9011	26995	29504
Staff strength	220000	425654	473914

* Estimated

Source: Economic Intelligence Service, Comparative Performance of 20 major banks in 1978.

This impressive growth in size, complexity of operations and geographical dispersity has forced the banks to decentralise. The typical organization chart for a bank is given in Exhibit 1⁴. As indicated, a bank's central office coordinates 5-10 zones, each of which control 4-5 regions consisting of 50-60 branches.

It must be stressed here that the branches are the roots of any commercial bank and branches generate a significant portion of the total income of a bank.⁵ It is, therefore, vital for the top management in a bank to ensure that branches are taking decisions in line with overall corporate objectives as geographical dispersity and size of operations have forced the banks to delegate decision making to the branches. We will devote the rest of this paper as to how branches can be effectively controlled to achieve the above objective.

Branch as a Responsibility Centre:

Before we define what sort of a responsibility centre the branch should be, let us take a look at the corporate objectives of a bank. A bank must be viable in the long run as the growth of industry is influenced by the development of the banking sector. A weak and non-viable banking sector will significantly hamper the national economy. However, a bank cannot seek to maximise profits only. It has to operate

⁴ In this paper, we will take the organization structure as given, though it could be debate if this is the best set up for a bank.

⁵ Over 70% of the total revenues of a bank are generated at the branch level.

within the constraints of national priorities. For instance, banks today are required to advance to priority sector at least 33.1/3 per cent of their total advances at concessional rates. We believe that a bank should try to maximise profits (or minimize losses) operating within the social and financial constraints imposed on it.

Once this basic premise is accepted, it logically follows that to achieve corporate objectives each branch of a bank should also try to maximise the profits, subject of course to the socio-economic constraints of the environment. Thus the branch should be assessed on the profits it makes or in other words, as a 'profit centre'. A 'profit centre' is defined thus by Anthony and Dearden:

When the financial performance in a responsibility centre is measured in terms of profit which is the difference between revenues and expenses, the responsibility centre is called a profit centre.⁶

All the thirteen banks which we contacted termed their branches as 'profit centres'.⁷ However, in twelve of these banks, branches were assessed solely on the basis of growth in deposits and advances and their mix. In the remaining one bank, branches were solely assessed on growth of deposits and their mix. A plethora of reasons are advanced for this practice of not evaluating branches as profit centres, the major reasons being:

- a) The branch has a fixed cost of production (interest paid) and a fixed selling price (interest charged). It does not have any pricing flexibility for inputs or outputs.

⁶ R.N. Anthony and John Dearden, Management Control Systems: Text and cases, Richard Irwin, 1976, p.239.

⁷ Out of these 13 banks, three are in the private sector and ten are nationalised.

- b) The 'product mix' of a bank is largely determined by RBI policies. It has to maintain liquidity ratios, lend certain percentage of funds to priority sector, etc.
- c) The operating expenses (where payroll constitutes a large chunk) are more or less fixed and the branch cannot influence it to any significant extent.
- d) Branch Manager has no control over the location of the branch which affects his business potential significantly.
- e) Government policies, such as credit squeeze, restrict the freedom of branches to generate more income.
- f) With social banking coming to the fore, the branch is forced to lend to priority sector, DRI, etc., where the return is lower and risk higher.

However, we feel that there **still** exists a case for 'Profit Planning' for the bank as a whole, which should percolate to the branch level, instead of only 'Business Planning' as currently practised. No doubt, business parameters such as deposits and advances do significantly influence profits; what we are arguing for is to incorporate all the factors which affect profits (subject, of course, to social constraints). This profit planning approach would motivate the branch manager to make better trade off decisions between costs and revenues, which might not fully occur in the business planning approach. ~~As~~ has already been pointed out, a bank should operate to maximise profits subject to social constraints. Since branches are the action points in any bank, 'profit consciousness' should exist at the branch level as well. Let us briefly indicate how a branch manager could affect costs and revenues and therefore, profits.

On the 'cost' side, branches can improve efficiency through:

- a) Pushing for low cost deposits
- b) Utilizing the resources available (which, in and by itself, may be fixed) to mobilize maximum deposits
- c) Improving customer service to exploit the full potential of the command area
- d) Exercising better control over addition of new staff
- e) Better utilization of human and infrastructural facilities
- f) Suggestions to improve systems and procedures and
- g) Better branch lay-out.

On the 'revenue' side, branches can take several measures to improve performance as follows:

- a) Optimize advance mix (subject to external constraints)
- b) Accelerate realization of outstandings
- c) Prevent 'leakages in income' (e.g. bad debts) through better systems and procedures and follow-up, and
- d) Proper cash management.

In addition, since we advocate profit planning at all levels in the bank, the branch managers would be more inclined to cooperate with corporate executives for any changes which could improve branch profitability (e.g., redesigning the branch organizational structure to improve their performance).

Thus we see that there is merit in evaluating branches as profit centres though they do not fully control all the factors affecting profits. We might point out that other measures such as growth in

deposits, advances, etc., and fulfilment of social objectives are also critical in evaluating branch performances. However, we are not advocating profit as a measure for inter-branch comparison. As the profits are significantly influenced by environmental factors, the branch should only be evaluated on the extent to which it has achieved budgeted profit targets. Our assertion is that profit, however, crude it might be, is a key indicator of branch performance and should be given more importance than is currently being given, though it should not be used for inter-branch comparison.

TRANSFER PRICING

For a branch to be effectively assessed as a profit centre, it is necessary to evolve a suitable system of transfer prices. We suggest the following three criteria in selecting such transfer rates:

- 1) It should motivate the branch managers to take decisions in line with corporate objectives,
- 2) It should help determine the economic performance of a branch, as accurately as possible, and
- 3) It should be simple to understand and easy to administer.

In a bank, the transfer pricing problem arises because some branches have more deposits than they can give out in loans while in other branches, the reverse may hold true. This problem is tackled by transferring funds from deposit heavy branches to loan heavy branches. Such transfers are normally routed through the central office. Obviously the transferring branch should get some credit for the funds transferred

and the transferee branch should bear some cost for the funds borrowed. This is done by attaching 'interest' on the funds transferred to and from the central office. In determining these interest rates (transfer prices), the following issues arise:

- a) On what basis should these transfer prices be fixed?
- b) Should the deposits to and borrowings from the central office carry the same transfer price?
- c) Should subsidies be given for low interest bearing priority sector and DRI loans?
- d) Should new branches be given subsidized rates?
- e) Should the transfer price be uniform across all the branches or should separate branchwise/regionwise/zonewise rates be determined?
- f) Should different rates be applied for different categories of deposits? and
- g) Should interest be charged on the net transfers by branches or on total transfer of funds?

In the following paragraphs, we will examine the current practices in fixing the transfer prices and develop a methodology for fixing suitable transfer prices. Note that the actual rates may be different for different banks (depending upon their asset and liability structures) but the basic methodology in developing these rates can be adapted uniformly.

Current Practices

Before we proceed to examine the current practices, it would be helpful to clarify some key terminologies.

The average cost of deposits to the bank is the average of the interest paid on its overall mix of deposits. This would mean a weighted average cost of the current, savings, and fixed deposits in the bank.

The overall yield of funds⁸ in a bank is the earnings on its portfolio of advances and investments. Typically, Rs 100 of deposits is employed in a bank as follows:

Rs 3 with RBI earning no interest

Rs 3 with RBI earning 6% interest

Rs 3 cash in tills

Rs 34 in securities earning 6%

Rs 57 in advances earning an average interest of 12%.

Thus in the above example, the overall yield of funds is about 9% p.a.

The average yield on advances is the average interests earned weighted by the amounts in each category of advances (such as C & I, Priority Sector, DRI, etc). In the above example, this works out to 12% p.a.

One would presume that since all banks are operating in a similar environment, their transfer pricing mechanisms would also be the same. However, this is not the case as is indicated in Table 2 which summarizes the practices followed by thirteen banks.

⁸ Since equity in banks constitute a negligible portion of the total funds available, we have ignored the cost of equity.

Table 2
TRANSFER PRICING POLICIES OF THIRTEEN BANKS

Basis Used	Number of banks using the basis for transfer rates	
	Funds transferred to Central Office	Funds transferred from Central Office
1. Average rate of interest realised by the banks on its advances	2	8
2. Average rate of interest paid by the bank on its actual deposit mix	9	3
3. Any other method	2	2

Source: Data Collected

We will now attempt to develop a framework to resolve the various issues identified at the beginning of this section.

Basis for Transfer Price

Transfer prices for banks can be fixed on the following three bases:

- a) On cost of deposits
- b) On yield
- c) On some other measure.

The last mentioned basis does not take into account either the cost of procuring funds or the yield on the funds deployed. We can, therefore, eliminate it from further analysis.

Since the overall yield on funds (9% in our example) is what the bank earns on its deposits, this should accrue to the branch where the deposit originated. However, this yield is the result of investments made at the Central Office as well as advances given at the branches. As such, the further costs incurred in earning this yield will have to be deducted in arriving at a 'fair' price for the deposits.⁹ We recommend the following formula:

Transfer price for funds transferred to Head Office ¹⁰	=	Overall yield on funds less (service cost of advances as a percentage of total deposits + Central Office expenses as a percentage of total deposits).
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However, the same basis cannot be used for borrowings from the central office as the overall yield incorporates low-yielding investments made at the Central Office. The average yield on advances (12% in our example) is a better indicator of the opportunity cost of the loanable funds. However, there are service costs which need to be incurred by the branches while making the advances. These need to be deducted from the average yield on advances to arrive at a 'fair price'. We recommend the following formula:

⁹These costs include costs incurred at two places: costs at the lending branch for sanctioning and follow-up of advances and costs incurred at the Regional/Zonal/Central Office levels.

¹⁰Here we are allocating the entire administrative overheads incurred at the regional/Zonal/Central Office levels to deposits. This is so since such branches should bear all the costs incurred in earning the overall yield. However, an argument could be made for recovering the corporate overheads from both deposits and advances. But the benefits derived might be outweighed by the increased complexity introduced into the system.

Transfer price for funds borrowed from Central Office = Average yield on advances - Service cost of advances as a percentage of total advances.

The salient features of our formula can be summed up as follows:

- 1) The rate on funds lent to Central Office represents a reasonably 'fair price' and should motivate branches to mobilize more deposits since it provides sufficient margin for most categories of deposits.¹¹ Further, this single rate for all types of deposits should provide the necessary incentive for branches to go in for low cost deposits.
- 2) The rate on funds borrowed from central office gives enough margin to branches for all types of advances which should motivate them to exploit all the potential in their areas of operation.¹²
- 3) The administrative overhead incurred at the Regional/Zonal/Central Office levels are factored into the transfer rates. Thus, the controlling offices operate on 'no profit no loss' basis. This results in fairly accurate pictures of branch profits.

Appendix II provides a numerical illustration which highlights the observations noted above.

Subsidies to Priority Sector Loans & New Branches:

In the previous sub-section we have recommended that the average yield on advances less a service charge should be the transfer price for the funds borrowed from the Central Office. However, as advances

¹¹ Some long duration fixed deposits might carry interest rates higher than this transfer price. However, such deposits do not constitute a significant proportion of the total deposits to warrant separate consideration.

¹² We recognize that advances to priority sector, DRI, etc., carry a lower yield than transfer rate. We shall deal with this in a subsequent section.

under the D.R.I., scheme or priority sector advances, which are obligatory to banks, yield less than the transfer price, the Branch Manager is not motivated to go in for more D.R.I., or priority sector loans. This will work against the social objectives of the bank. This anomaly can be corrected by giving a subsidy on the D.R.I., and priority sector loans so that they too 'contribute' to the profit of the branch. Moreover, the total of the subsidies will give the 'cost' of going in for such advances, which is a useful bit of information to the top management. The subsidy can be fixed so as to give a yield marginally higher than the 'cost' i.e., the transfer price rate for funds borrowed.

While most banks follow the above scheme of giving a subsidy to D.R.I., and priority sector loans, some extend it to give subsidies to new branches also, on the grounds that subsidy is needed to offset the higher initial expenditure and development cost of these branches. These higher costs, however, can be factored into the budget itself in which case the branch will be expected to minimise losses.

Uniform Vs. Multiple Rates

Our field study revealed that one bank calculates separate transfer rates for each branch based on its actual mix of deposits. This system has the obvious weakness of complexity with the use of multitudes of rates. Again, separate rates for regions/zones might not be desirable since it will not highlight regional/zonal

peculiarities in terms of high cost deposits and/or low yield advances. We, therefore, recommend a uniform rate.

Net Vs. Total Transfers

Some banks calculate transfer prices on the total transfer approach i.e., they treat all deposits as funds lent to a central office pool and all advances as funds borrowed from that pool. Others follow a 'net transfer' approach. Here they treat the excess of deposits over advances of a given branch as funds lent to central office and excess of advances over deposits as funds borrowed from central office. We advocate the total transfer approach because under this method, the sum of the branch profits is equal to the overall bank profit. This does not occur in the net transfer approach because the branch gets an excess credit for advances funded from its own deposits. This excess credit is reflected as a 'loss' in the central office. The numerical example in Appendix II brings this issue into sharp focus.

Implementation

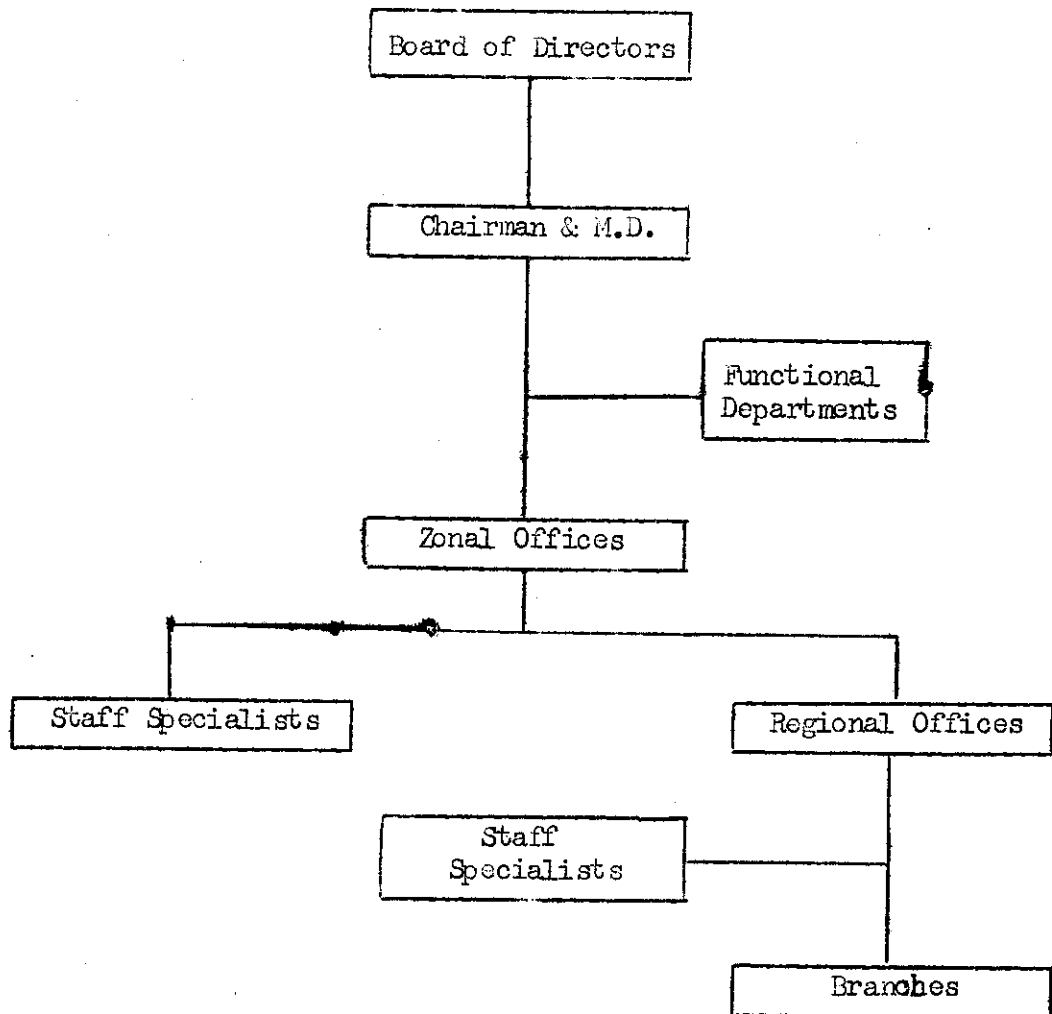
Several factors are prerequisite to the successful operationalization of profit planning in banks. Top management commitment is a must. Proper training at the lower level officers which orients them to thinking the 'profit way' must be provided. Profit figures should be given importance in the evaluation of a branch, though it should never be the sole criterion. In short, profit consciousness must percolate through the bank and the management information and control system, by

throwing up only the exceptional cases, should focus top management attention on the deviations, resulting in management by exception.

We also recognize that the advocated 'profit planning' cannot be introduced overnight. It may be gradually introduced in the key branches, which may be characterized in terms of growth potential, location, volume, etc. ('A' class branches) and then extended to other branches after sufficient experience has been gained.

Exhibit I

TYPICAL ORGANIZATION STRUCTURE OF A LARGE BANK



Note: The above chart only depicts a broad organizational structure and the actual structure may vary from bank to bank.

APPENDIX INumerical ExampleI. Basic Data

	<u>Rate(%)</u>	<u>Branch A</u>	<u>Branch B</u>	<u>Bank as a whole</u>
Deposits	6	Rs. 100	Rs 50	Rs 150
Advances	12	30	70	100
Reserves	3.0	-	-	50
Expenses	-	1.0	1.0	2.5

Note that the expenses for the bank as a whole are greater than the sum of the branch expenses due to inclusion of Central Office expenditure.

II. Computation of rates

Average cost of deposits		6%
Average yield on advances		12%
Overall yield on funds		$(10 \times .12 + 50 \times .03)/150 = 9\%$
Service cost for advances	=	$2.00 \times (100/250) = \text{Rs. } 0.8$
- as a percentage of Advances	=	$(0.80/100)100 = .8\%$
- as a percentage of deposits	=	$(0.8/150)100 = .533\%$
Central office expenses as a percentage of deposits	=	$(0.5/150)100 = 0.333\%$

APPENDIX I (CONTD.)

Transfer price for funds borrowed from Central Office	} average yield on advances - Service cost of advances as a percentage of advance.
	= 12 - 0.8 = <u>11.20%</u> .
Transfer price for funds transferred to central office	} Overall yield on funds - service cost of advances as a percentage of deposits - Central Office cost as a percentage of deposits
	= 9 - 0.533 - 0.333 = <u>8.13%</u>

III. Computation of P & L Statement

<u>EARNINGS</u>	<u>Branch A</u> Rs.	<u>Branch B</u> Rs.	<u>Bank</u> Rs.
Interest on funds transferred to the Central Office	8.13	4.07	-
Yield on advances	3.60	8.40	12.00
Yield on reserves	-	-	1.50
Total earnings	<u>11.73</u>	<u>12.47</u>	<u>13.50</u>
<u>EXPENSES</u>			
Interest on funds borrowed from Central Office	3.36	7.84	-
Interest paid on deposits	6.00	3.00	9.00
Expenses	1.00	1.00	2.50
Total Expenses	<u>10.36</u>	<u>11.84</u>	<u>11.50</u>
Profit	1.37	0.63	2.00

Note that the sum of the branch profits is equal to the overall profit of the branch. The Central Office will show no profit or loss.

APPENDIX II

Effect of Total and Net Transfers

The example in Appendix I has been worked out on the basis of total transfer of funds. The profit figures are:

	<u>Branch A</u>	<u>Branch B</u>	<u>Bank</u>
Profit	Rs. 1.37	Rs. 0.63	Rs. 2.00

Let us work-out the same example on the basis of net transfer of funds.

	<u>Branch A</u>	<u>Branch B</u>	<u>Bank</u>
<u>Earnings</u>			
Interest on funds transferred to C.O.	Rs. 5.69	-	-
Yield on advances	Rs. 3.60	Rs. 8.40	Rs. 12.00
Yield on reserves	-	-	Rs. 1.50
	<u>Rs. 9.29</u>	<u>Rs. 8.40</u>	<u>Rs. 13.50</u>

Expenses

Interest on funds borrowed from C.O.	-	Rs. 2.24	-
Interest paid on deposits	Rs. 6.00	3.00	Rs. 9.00
Expenses	<u>1.00</u>	<u>1.00</u>	<u>2.50</u>
Total expenses	<u>7.00</u>	<u>6.24</u>	<u>11.50</u>
Profit	2.29	2.16	2.00

Note that the sum of branch profits is greater than the profit of the bank implying that branch profits are overstated. The differential in the branch profits arises out of double counting the yield on advances financed by the branch deposits, as shown below:

APPENDIX II (CONT'D.)

	<u>Branch A</u>	<u>Branch B</u>
Advances financed by own deposits	Rs. 30	Rs. 30
Yield double counted	3.07%	3.07%
		(11.2 - 8.13 = 3.07%)
Net effect	0.92	Rs 1.53

This double-counting effect when deducted from the profit shown under net transfer method gives us the profit by the total transfer method.