BNDE
BANCO NACIONAL DO DESENVOLVIMENTO ECONÔMICO

G T M

THE INTERNAL CONTROL OF DEVELOPMENT BANKS

by

Colin Senior

GTM BNDE/MIT WP 24

WORKING PAPER

M.I.T.
SLOAN
SCHOOL
OF MANAGEMENT

BNDE/MIT JOINT DEVELOPMENT BANK TRAINING

AND RESEARCH PROJECT

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GRUPO DE TRABALHO MISTO
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MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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The Grupo de Trabalho Misto is the working entity carrying on the goals of the BNDE/MIT Joint Development Bank Training and Research Project. The Project was created in 1967 with the support of a Ford Foundation grant. It is providing training, technical assistance, and action research designed to increase the capability of development finance institutions serving as BNDE financial agents in Brazil. The members of the Grupo de Trabalho Misto are:

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Dr. D. Anthony Butterfield, Senior Representative, Resident in Brazil

October, 1969

The Internal Control of Development Banks

This paper will summarize our thoughts and work in this area. By Internal Control of Development Banks we mean stage III in the overall SIPEME diagram.

I	BNDE	BNDE Internal Control BNDE Control of Member Bank
II III	BD	Internal Control of BD (Sipeme-BD)
IV		BD's Control Over Borrower
V	Borrow	Borrows's Internal Control (Sipeme-E)

This is the section often referred to as SIPEME-BD. The overall concept is presented more fully in Heinz Luzny's SIPEME working paper. For this section of the system we have adopted a two-part plan.

I) Discuss the concept of Control
II) Review the situation
III) Draw up an information flow diagram that will serve not only the control needs but also legal and fiscal panbooks.
IV) Discuss the problem with informed people working in a similar area in the USA.
V) Summarize and make conclusions.

It must be stressed that the recommendation will be of a very general nature. This is for two reasons: first, that no two development banks are the same and suitable control systems will require a substantial element of custom-building; and second, that the author hesitates to be dogmatic in detail on this subject because he has never seem a development bank.

I - Control

In introducing the concept of Management Control, Anthony says: "Management Control is the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of organizational objectives."

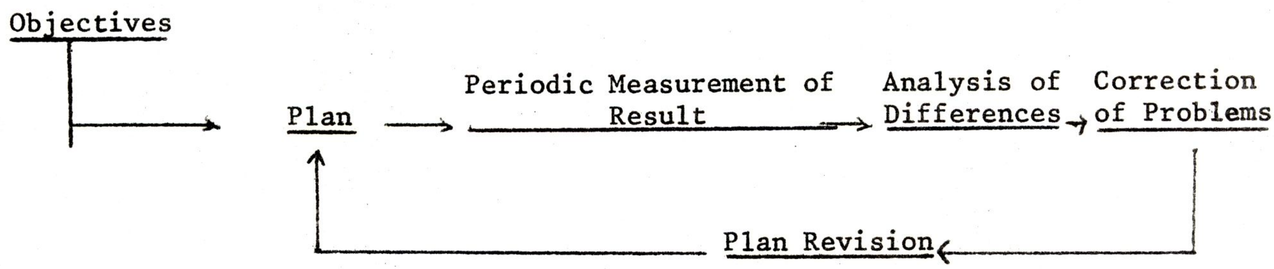
This definition merits further discussion on two grounds. The starting-point for all rational decision-making is the statement of organizational objectivities. This seemingly facile statement is fundamentally important; only if there is an explicit goal can one devise a control system to maximise its achievement. The other noteworthy point in Anthony's definition is his distinction between " effectiveness" and " efficiency". There is a conceptual difference here; effectiveness measures the extent to which the bank is meeting its objectives, e.g.:

8750 new jobs achieved vs. a goal of 10,000

Efficiency is concerned with the utilization of resources to meet these objectives, e.g.:

Each new job required NCr $ 15,000 of investment as compared with a budgeted NCr $ 12,500.

Having looked at the definition of control, let us look for a moment at the process by which control is achieved:



From the all-important objective definition, a plan is formulated to achieve the objective. Then through the process of comparing " actual" with "planned", and accordingly adjusting operations, the organization is kept pointing towards its goals.

One of the main purposes of a system is to be a motivational tool. Line managers are the focal points in management control, and it is they whom the system must motivate to make their results conform with those planned.

This process of control occurs at several levels, and Anthony distinguishes three:

Strategic Control
Management Control
Operational Control

While there is considerable overlap between these levels, it is useful to distinguish them. Typically, as one goes from strategic through Management to Operational control, the level of responsibility gets lower and the time horizon gets shorter. Strategic Planning sets the overall organizational course and strategic control monitors performance. Managerial Planning sets compatible sub-goals for individual areas of the firm and its monitored by Managerial Control. Operational Control Systems typucally relate to such areas as inventory and production control.

Decentralization

Intimately related to the concept of control is the concept of decentralization. This is the idea originated in practice by Alfred P. Sloan, Jr. in General Motors. Inheriting a sluggish amorphous organization he turned it into divisions which where autonomous within his policy framework; thus separating the making of policy from its administration. The resulting entity soon took over the leadership of the American auto industry from the highly centralized Ford Motor Company. The philosophy of decentralization is that most business organizations are too big for one man to run singlehanded; consenquently he assigns tasks to others and gives them as far as possible authority to carry out the task and also responsibility and acccountability for achieving it.

The relationship between decentralization and Control is simply that the latter is the link that connects the decentralized units to the centre; that relates the administration of policy to the formulation of policy.

One important point arising from this is that in a good control system, a manager should never be evaluated in areas over which he has no authority.

Designing a Control System

How do we put all these ideas into practice to benefit our own organization ? One of the first points is to appreciate that no control system is perfect; again, to quote from Anthony:

" The purpose of a management control system is to encourage managers to take actions that are in the best interests of the company. Technically, this purpose can be described as goal congruence. For many reasons, perfect goal congruence is not achievable; the most we can realistically aim for is a minimum amount of conflict between individual and corporate goals." Thus trade-offs will inevitably have to be made.

Devising a control system is then a four-stage process:

1) Define objectives.
2) Devise an organization for achieving the objectives; i.e., set responsibility centres.

3) Decide what are the key variables to be used for monitoring cash responsility centre.
4) Decide how these key variables should be used to evaluate the managers of the responsibility centres.

II - Review of Situation

At the very beginning of the project in 1966 a series of visits ware made to several of the banks in the FIPEME network , and detailed notes were competed on the bank's operations. It appeared from this study that the internal control systems were not highly developed. This study was confirmed by two subsequent studies by Heinz Luzny and Miklos Vasarhelys. In the banks visited there was very little internal accounting or budgeting and control was limited to disbursement control over the borrower.

It was also apparent from the earlier study that no simple ready-made system would have universal applicability since the banks were widely. different in, among others, the following respects:

a) Size - The banks range from assets value of US $ 1.5 million to US $ 115 million.

b) Activities - Although they all are involved in industrial lending they may also have a greater or lesser part of their resources devoted to any subject of:
   - Acceptances
   - Agricultural Credit
   - Cooperative Lending
   - Short Term Lending
   - Real Estate

c) Organization - Not all the banks are departmentally organized in the same way. For instance, among the banks we have written up in Cambridge, we found one with organization:

- President
  - Vice-President
    - SECTORS
      - Agricultural Credit
      - Industrial Credit
      - etc.
  - Appraisal Coordinator
  - Superintendent
    - Functional Departments
      - Clerical
      - Accounting
      - Economic
      - Legal
      - Engr

and another with an organization essentially of the form:

President

Project Manager

Economic   Legal   Engineering

Financial and Administrative Manager

Crerical   Accounting   Economic   Legal

Thus rather than attempt a detailed and exhaustive system for all institutions in the system we will confine ourselves to a discussion of the industrial lending department of a development finance institution.

III - Formulating the Information Flows

Having limited the discussion on the industrial lending department we can effectively think of it as a unit in itself. This unit will have to define the information flows necessary for its operation and maintain records for control, fiscal and legal purposes. The two following charts represent our idea of one possible scheme. The charts should be self-explanatory. The former has been chosen so as to make them as compatible as possible with the proposed SIPEME-E plan. The level of compatibility is however fairly low owing to the very different operations of the two sorts of institutions.

The scheme is probably over-ambitious. It is for instance, improbable that the concepts of cost accounting will be applicable in much detail in what is essentially a job-shop situation. However, we believe that this sort of framework will enable the bank to plan, budget and schedule its financial and human resources in a coordinated and optional manner.

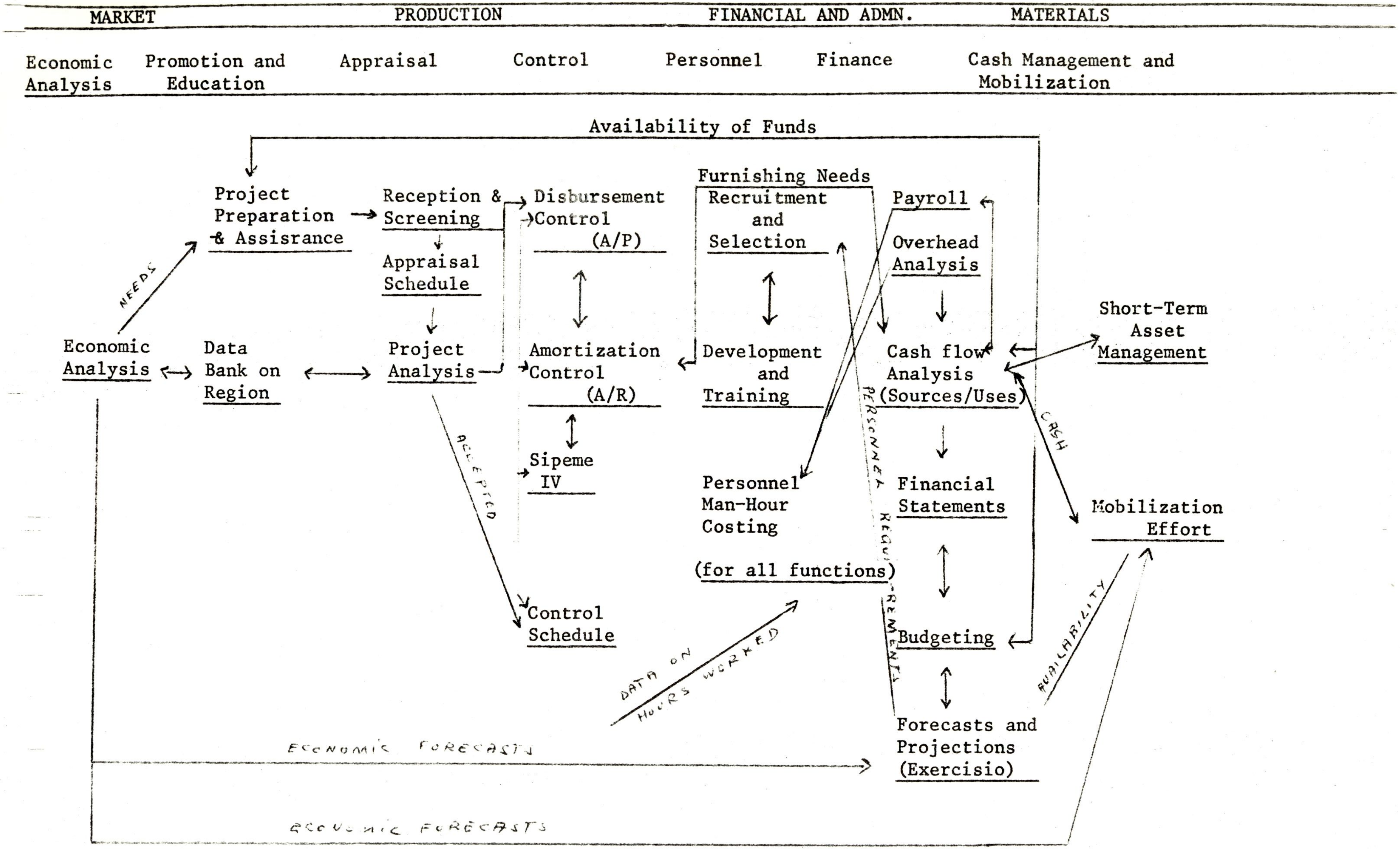
It should be noted that SIPEME IV (the bank's control over the borrower) is incorporated in the scheme; also the "exercicio" in the forecasting and budgeting area.

It should be stressed that not all of the information in the first chart need flow in "hard" form: much of it can be transferred by word-of-mouth at policy meetings, etc. Nor should the frequency of flow be the same for all information; for instance, while amortization control should be recorded day-by-day, the exercicio need only be performed at six-month intervals.

The second chart lists the records that will be necessary to substain the flows of the first chart.

Of itself this scheme or any like it, will not comprise an effective control system. The next section will discuss, in the light of U.S. experience, how this may be achieved.

Information Flows



RECORDS

MARKET		PRODUCTION		FINANCIAL AND ADMN.		MATERIALS
ECONOMIC ANALYSIS	PROMOTION AND EDUCATION	APPRAISAL	CONTROL	PERSONNEL	FINANCE	CASH MANAGEMENT AND MOBILIZATION
Record of Departmental Manhours	Manhour Record	Manhour Record	Manhour Record	Manhour Record	Manhour Record	Manhour Record
	Regional Data Bank	Requests	Record of: Projects in Process. Project comple ted. Restrictive Covenants	Manhour Costing Data	Record ofFixed Assets.	Record of Sources Maturities Conditions Cost Denomination
		Projects Refused Accepted	Schedule and Record Disbursement Repayment Visits Required Info.	List of Personnel & Qualifications & Development Plan	Record of Overdue Payments i) From Customers. ii) To BNDE, etc. Bad Debts	Short-Term Fund Disposition
		Schedule & Record of Project Analysis.			Plan of Accounts List of Shareholders Portfolio Record of BNDE Requirements	Record of Current Negotiations

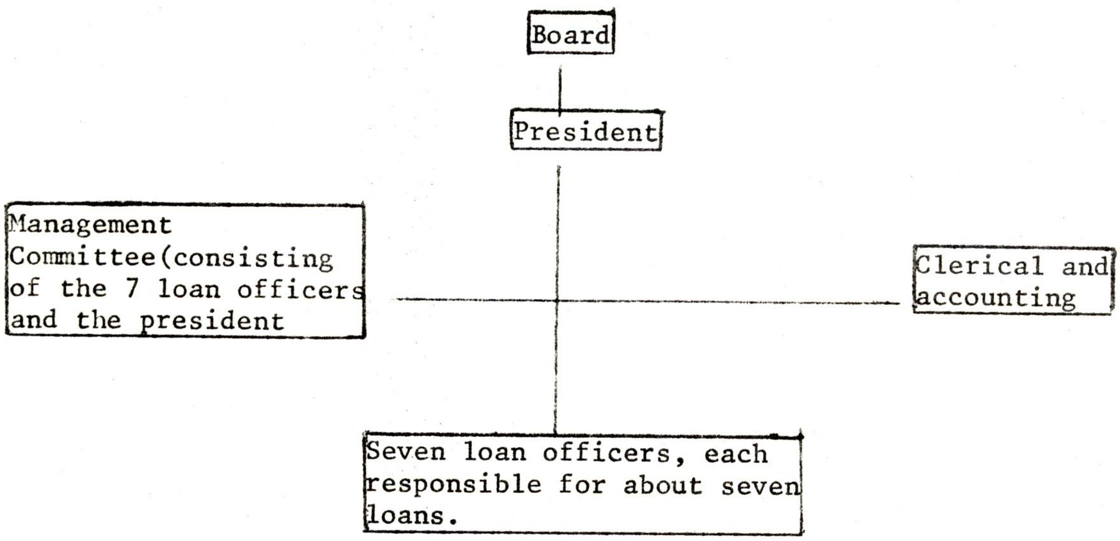
IV - A Discussion of Comparative Institutions in the US.

Although Institutions in the US do not have direct correspondence with Brazilian Development Banks, there are close similarities in the cost of Venture Capital companies and Small Business Investment Companies. Discussions were held with executives in two venture Capital Corporations and with the officers of a large accounting firm that specialises in SBIC problems.

In all cases it was stressed that for lending operations of this type, control centers about the individual projects. Indeed, the SBIC specialist from the accounting firm stated that when auditing on SBIC he would spend one hour on the company's internal control procedures and three hours for each of the projects outstanding. This is saying, in essence, that we must first perfect SIPEME IV: then we must give the responsibility for each project to a simple loan officer and the main job of the internal control system will be to verify that he is managing the loan with both competence and integrity.

A Venture Capital Company

As an example of such a system we will outline that used in one of the Venture Capital companies. This system is incidentally identical to one proposed by the accounting company, even though the two companies have no dealings. The Venture Capital Company has total assets of about $ 50 million and has 47 projects oustanding: It has the following organization:



Each of the seven loan officers has a Master degree in business or equivalent qualification.

Apart from the routine accounting for disbursement and repayments (which is very simple) there are three control processes.

Board

iii

Management
Committee

ii

Loan officer

:

Borrower

i) This corresponds to our SIPEME IV. The loan officer will have a seat on the board of the company, attends the monthly board meetings and is given the full financial figures; beyond this he can on his own judgement devote more attention to the company if it is required.

ii) Each month the loan officer submits a brief report on all his projects to the Management Committee of which he is a member. This report consists of:

Notes on the most recent board meeting (1 or 2 pages)

Selected financial and operative figures including:

Shipments
Profits
Orders
Backlog

In addition, at the management meeting there is a review of the status of new and unclassified projects, and of any other investments.

iii) After the monthly management meeting the president reports to the board giving a summary of:

Projects approved
Funds Invested in the month
Investments sold or paid off
Commitments outstanding at month-end
Bank Balance Sheet
Portfolios of publicity treated and
U.S. Government Securities
Bank Profit and Loss Statement
One paragraph on each project
including shipments, profits,
orders and backlog.

These figures are compared with a one year budget; the bank has found no real value in formal projections over a long-term.

The Clerical Department of the bank do the accounting (which as mentioned before, is extremely simple) and keep records. Each project has two files, a current file and a historical file. The loan officer is responsible for getting all relevant documents to the clerical department. The current file contains:

a) Basic Information (eg., loan terms,etc.)
b) Most recent audited reports. Current monthly figures (presented on a comparative basis with the previous year)
c) Current Monthly Board meeting report.

The historical file contains:

a) All basic documents
b) All audited Reports
c) Two years of monthly reports

If the company is causing alarm, more detailed information will be kept. In general ratio analysis is not performed because the companies are non-standard in their early days - which is when the bank will have an interest in them.

The administrative officer made it clear that the purpose of the system was to maintain control by putting the onus on one man - the loan officer. This not only introduced strong performance motivation but enabled them to minimize overhead cost of extra (and irksome) paperwork.

<u>Discussions with the accounting firm</u>

Although the accounting firm has no connection with the Venture Capital Company, it was interesting that the essentially the same system was proposed by both. The author raised the question of whether a system that focussed on the individual loan officer would be applicable in Brazil where the level of education and experience would be considerably power; after all, each of the Venture Capital Company's loan officers had an MBA. He was assured, however, that this should constitute no real impediment to the implementation of such a system in Brazil. The loan officers would probably have to make fuller reports and be given more directions, but, even so, a system based on individual responsibility would still be preferable to any other.

<u>Summary & Conclusions</u>

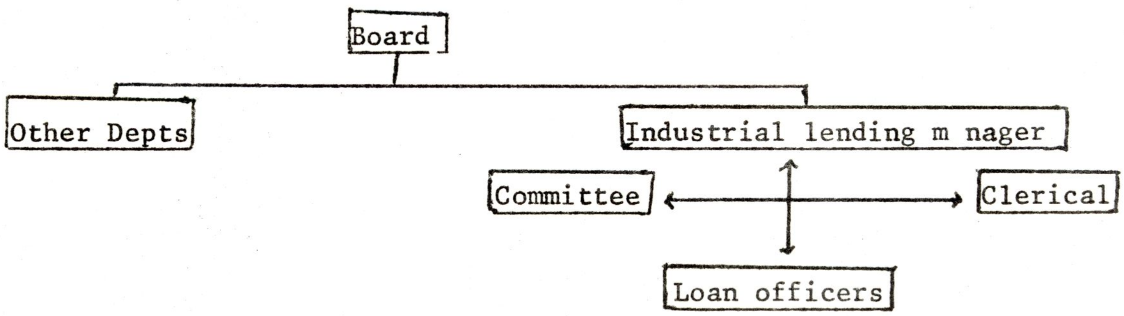
For the industrial lending department of a development bank, it is clear that the internal control system must be based on the controls for the individual investments. A system giving responsibility and accountability to the loan officer seems attractive on several grounds:

i) The loan officer will be in very close touch with all levels of the borrowing company, much more than would be the case with the personel, more bureaucratic methods.

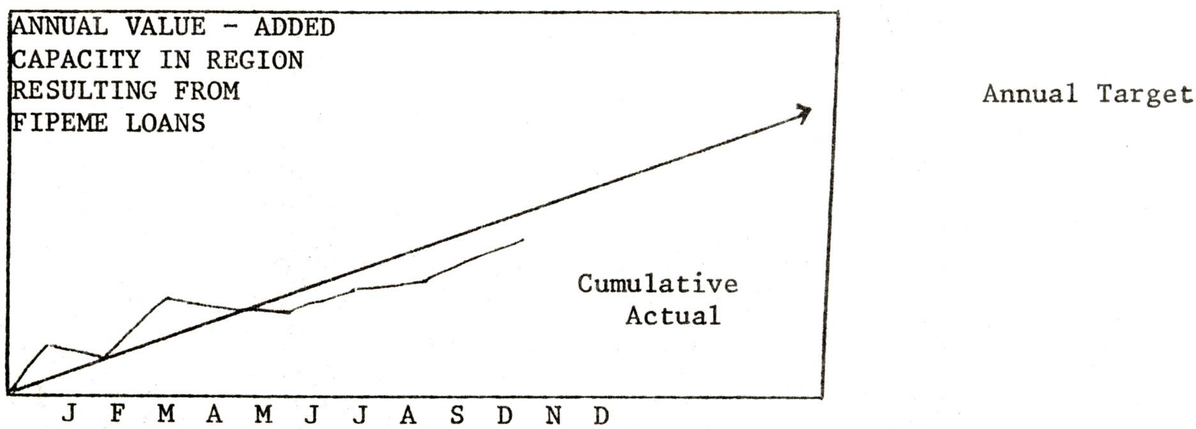
ii) Although formal reports will be necessary, paper-work will so far as possible be minimized.

iii) Through having both responsibility and accountability for this job, the loan officer will not merely perform it more effectively but will develop management skills faster than if the decisions are reserved for a higher level.

Because the state of the art of management in Brazil is less developed than in the US, the delegation will have to be less complete; there will have to be some formal accounting for time and process. Let us suppose that there is an organization such as:



The communication between the industrial lending manager and the Board could be very much as practiced in the US Venture Capital Company. However, because inflatio makes planning and budgeting more necessary, there should be more detailed budget - especially a one-year cash budget and a five-year projection. The format for this, is described fully in Heinz Luzny's Exercício which has proved readily adaptable as a projection tool. To provide the control element, the one year budget should be reviewed at the monthly management meetings. Wherever possible results should be displayed in graphical form, e.g.



In addition, delinquent loans will be specified and reviewed.

The primary object of the 5-year budget is for planning rather than control.

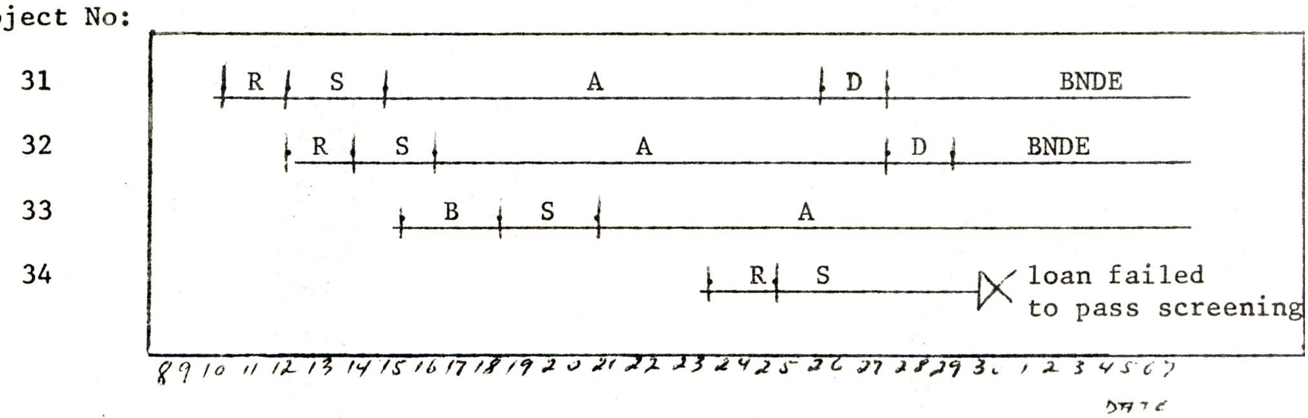
The activity of the industrial lending department will be projected for five years into the future. This will make management aware of the decisions that will have to be made now if future plans are to be realised. Are we adequately capitalizsed ? Should we open branches ? What are our trainning needs ? The plan will point up these questions and enable management to take relevant action in adequate time.

Operational Control within the Dept

Within the industrial lending department the two operational functions are apprasied and project control.(Promotion, education and possible mobilization are also carried on, and mention will be made of them later.) The main control over appraisal will be the review by the Management Committee; however, to help ensure that the selection process is done with speed, cheapness and effectiveness, they should employ the following type of system: A loan will go through the following stages: Reception, screening, appraisal decision, legal, disbursement, follow-up and amortization.

The first phase: (reception, screening and appraisal) results in the decision wheth to send the application to BNDE for approval. If it is approved by BNDE it returns to the industrial loan department for a legal contract to be worked out, followed by disbursement, follow-up and amortisation. So as to keep a check on this process, the clerical department should maintain a GANTT chart such as :

Project No:



In the above diagram R correspondes to Reception
S .... Screening
A .... Appraisal
D .... Decision

For each process, it may be possible to have a standard time (probably depending on the type of project). The chart gives a quick summary of each loans's processing stage; and, where actual time is significantly longer than standard, will point up problem areas. After the decision stage, the application will be sent to BNDE and, if it spends more than the standard BNDE processing time, the industrial loan manager will expedite it. The chart will be updated daily.

Whether the appraisal has been done effectively will be shown in the long run by success of the project. However, in the short run, for control purposes, the individual scores on the BNDE appraisal evaluation will give quick feedback.

After BNDE approval has been given the loan contract will be drawn up, agreed and signed. This will be included on the GANT Chart. Then for each loan, a new Chart must be constructed to track disbursement, amortization and operating information. The information required of the firm will typically be:

a) Semestral projection
b) Monthly review of key indicators
c) Semestral review of results
d) Audit
e) Annual Business Plan

The timescale on the new chart will be monthly.

Visits on the firm will also be recorded on it. The actual arrival date of information and installments will be noted on the chart and, subsequently, the date on which review of the information was completed. If required information or installments are not received on their due date (or within a specified period after it) or are otherwise unsatisfactory, the clerical department will inform the loan officer in charge of the projects.

This chart will be in addition to the regular disbursement-amortization book-keeping which will be straightforward accounting.

Conclusion

The entire stress in this approach is on controlling projects through working individuals responsible for them.

Without this critical element, the paperwork involved will lose most of its effect.