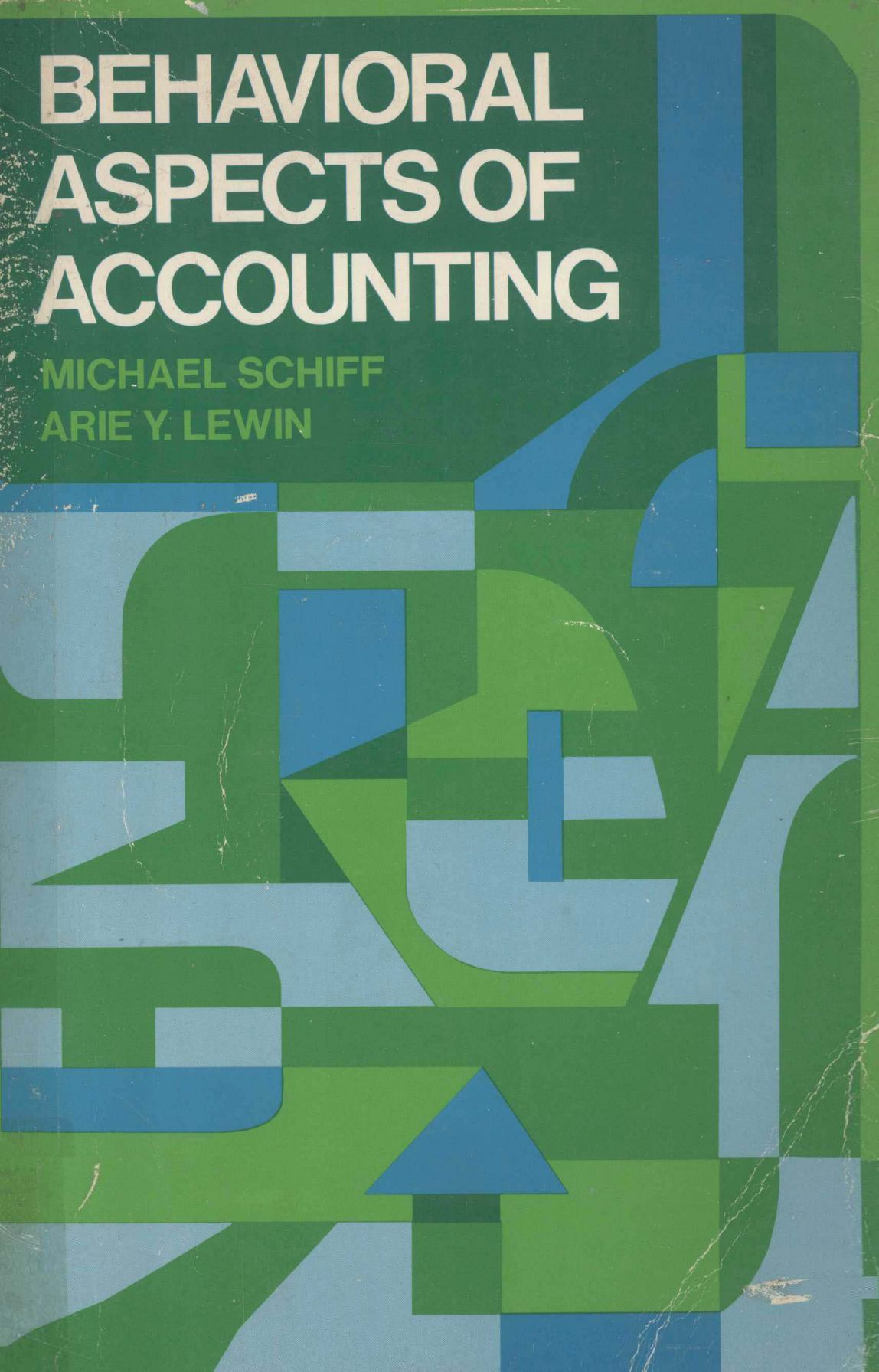


# BEHAVIORAL ASPECTS OF ACCOUNTING

MICHAEL SCHIFF  
ARIE Y. LEWIN



# **BEHAVIORAL ASPECTS OF ACCOUNTING**

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# Preface

The past few years have witnessed a growing awareness on the part of accounting educators of the importance of behavioral science to accounting. The report of the Committee on Behavioral Science Content of the Accounting Curriculum<sup>1</sup> concluded with an urgent recommendation to academic accountants “to assume the responsibility of incorporating relevant materials from behavioral science in accounting curricula.” This conclusion was based on the assumption that “If accounting is in fact a behavioral process, then accounting education by definition should include appropriate attention to behavioral considerations.”<sup>2</sup>

This book represents our attempt to identify relevant concepts and findings from the behavioral sciences and relate them to financial and managerial accounting. The readings include related contributions from the disciplines of economics, management science, and finance. The book is geared to the needs of both the senior undergraduate in accounting and the student majoring in accounting in an

<sup>1</sup>Report of the Committee on Behavioral Science Content of the Accounting Curriculum, Supplement to Volume XLVI of the Accounting Review, 1971, pp. 247-285.

<sup>2</sup>*Op. cit.*, p. 247.

MBA program. It is intended for multipurpose classroom use. It can serve as a supplement in financial and managerial accounting and as the text in a course on the behavioral aspects of accounting. With these objectives in mind:

1. The book develops a behavioral model of the firm.
2. The text relates behavioral science to budgeting, planning, control, decision-making, and reporting.
3. Each chapter has an introductory section followed by a discussion of the selected readings.
- 4.. A comprehensive bibliography keyed to each chapter is presented at the end of the book.
5. A series of discussion type questions appears at the end of each chapter.

We would like to take this opportunity to thank Professor Russell M. Barefield for reviewing the manuscript and providing us with helpful and constructive comments.

We also wish to acknowledge our indebtedness to authors and their publishers who have given us permission to reprint their articles. We owe our appreciation to Mrs. Shirley Covington of the Prentice-Hall staff for a most efficient job in handling the production of the book.

Michael Schiff

Arie Y. Lewin

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# PART ONE

## The Theory of the Firm and Managerial Behavior

### THE SETTING

It is only in relatively recent years that the accountant has concerned himself with the utility of his output to the users of his reports. Historically, he did not segment the market for his information, preferring to lump all users together by furnishing a single set of reports that presented the "economic facts" of the enterprise. The motivation of management as participants in this fact presentation was not considered, and the behavior induced by the presentation of these "facts" was ignored. Emphasis was placed on *what* was being presented with little regard for *by whom*, *for whom* and *for what* purpose the reports were developed. This is not to suggest that there was an absence of awareness of people and their behavior as suppliers and consumers of information. It was present and the accountant knew it, but he elected to disregard its existence in pursuing his role.

On the one hand, it could be argued that the neglect may well have been due to a lack of a well-defined theoretical structure that would permit the accountant to address himself to the behavioral problems. On the other hand, one might suggest that the accountant was merely responding to the environment in which he

operated and reflecting a behavior generally associated with his activity, not being prone to modify his approach to his task as he perceived it.

Perhaps the accountant consciously or otherwise adopted an attitude not unlike the one in vogue in economics during much of the same period. This suggested that the major thrust was the allocation of scarce resources. In pursuing its goal of profit maximization, the firm assumed a rational behavior on the part of decision makers as they proceeded to convert a finite number of factors of production into a finite number of products and having available to it full information on product demand, factor supply and production technology all operating under conditions of perfect competition with complete certainty assumed.<sup>1</sup> Figure 1-1 presents the decision process associated with the traditional economic theory of the firm. The individual, his perceptions, aspirations, attitudes, goals, and motivation were ignored, and the human being was perceived as an adjunct to a machine, "something to be taught and economically motivated to maximize productivity."

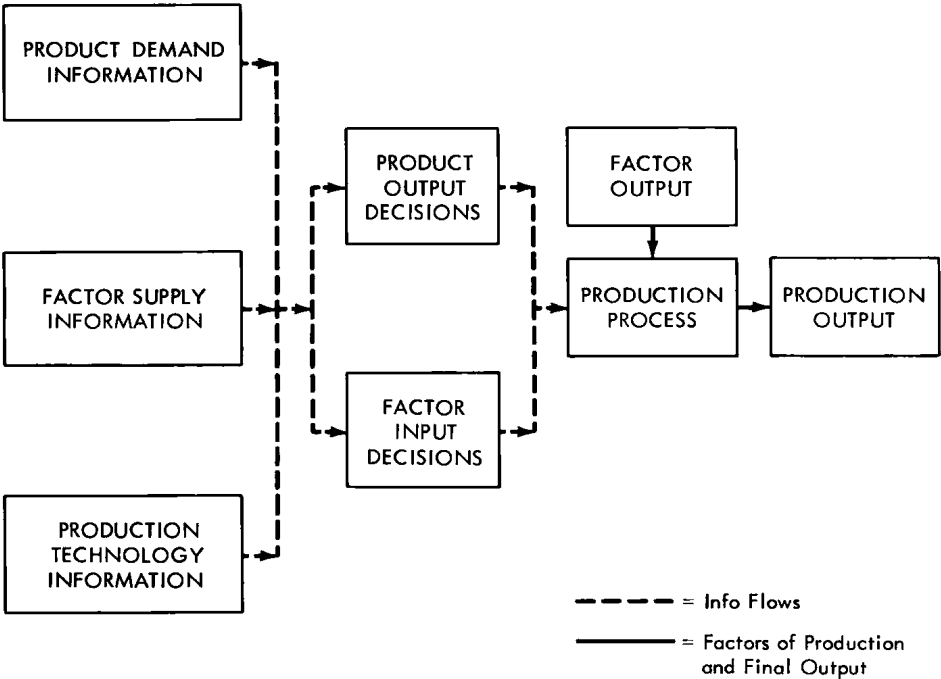


FIGURE 1-1 Decision Process of a Firm

Source: Kong Chu and Thomas A. Naylor "A Dynamic Model of the Firm" *Management Science*, Volume II, (May 1965).

It is only in relatively recent years that this traditional approach in accounting has been questioned, particularly in the area of managerial accounting. The transition from the score-keeping role of accounting to that of providing information for decision-making and control suggested the need to study behavior implications of preparers and users of information. It is also worth noting that a committee

<sup>1</sup>Thomas H. Naylor, "The Economic Theory of the Firm: Three Models of Analysis," *Quarterly Review of Economics and Business*, Vol. V, No. 4, 1965, pp. 33-34.

of the American Accounting Association addressed itself to the problem as recently as 1971 and reported:

To state the matter concisely, the principal purpose of accounting reports is to influence action, i.e., behavior. Additionally, it can be hypothesized that the very process of accumulating information, as well as the behavior of those who do the accounting, will effect the behavior of others. In short, by its very nature, accounting is a behavior process.<sup>2</sup>

If the accountant is to adopt this view, then his concept of the firm needs to be changed. What has evolved in recent years is a behavioral theory of the firm that recognizes the business firm for what it is: an organization composed of people. A short exposition on a behavioral decision-making view of the firm and an overview of a motivational model of managerial behavior is presented in the section titled, "A Behavioral Theory of the Firm."

## ORGANIZATION OF THE BOOK

The basic plan of the book is to present relevant behavioral science concepts and findings as they relate to four major activities of the firm of concern to accountants. These are Planning and Budgeting, Decision Making, Control, and Financial Reporting. In addition, Part One of the book focuses on the firm as a complete entity. Thus, Part One presents an integrative behavioral theory of the firm. The selection of articles provides additional theoretical views of the firm from a variety of social science disciplines.

In Part Two, Planning and Budgeting, the focus is on the formulation of operational goals and the interaction of individual behavior in this process. The articles examine such dimensions of the process as participation and satisfaction, level of goal difficulty, levels of aspiration, and the conflict between personal and organizational goals.

In Part Three, Decision Making, the focus is on individual and organizational decision making. One group of articles examines such fundamental issues of individual and group decision making as perception, effects of success and failure, risk aversion, and status. The second group of articles involves the effects of various organization structures on decision making. Finally, the effect of alternative information inputs on decision making is presented.

In Part Four, Control, the articles selected explore individual problems such as performance measurement and individual adaptation to control. The other dimension consists of organization structure and internal control, particularly the problem of centralization-decentralization and the relationships between administrative hierarchies.

In Part Five, Financial Reporting, the articles selected involve income smoothing behavior, the reliability of reported accounting information, and the relevance of accounting information to the investor user.

Each section of the book begins with a discussion of the specific topic in

<sup>2</sup>"Report of the Committee on the Behavioral Science Content of the Accounting Curriculum," *The Accounting Review*, Supplement 1971, p. 240. See also "Decision Models and Accounting Measurement: A Challenge for Accountants," T. R. Dyckman, Stanford Lectures in Accounting, 1971.

relation to the behavioral view of the firm presented in Part One. This is followed by an introduction and summary of the readings. Following the selected readings, each section of the book concludes with a number of study questions. The intent is that, in the process of discussing these questions, the reader will be able to relate the readings to the main concepts and effect an integration of the material presented.

## **A BEHAVIORAL THEORY OF THE FIRM**

Modern organization theory is concerned with describing the behavior of the firm as an entity on the basis of understanding the actions and motives of its participants. The business firm, whether large or small, has traditionally been viewed as owned by its shareholders, and its concerns have been financial, revolving around price and output decisions. Regardless of what the complete set of goals of a firm may be, accountants have prepared financial reports reflecting the results of the firm's annual operations for distribution to its shareholders and the public through its financial statements. These reports imply the existence of a goal set that most likely includes cost and revenue goals in the form of aspirations regarding growth, profits, sales market share, production, inventory, rate of return, overhead, product mix, personnel, and the like. Yet the firm has a variety of other goals that are not obvious from reading the financial statements but that are reflected in the financial statements.

To describe how the firm adopts for itself a set of goals, and how it proceeds to adapt and achieve them, requires an understanding of the underlying decision and problem-solving processes of the firm. To be more specific, a modern theory of the firm is concerned with the goal-directed behavior of the firm in terms of the goals, motivations, and problem-solving characteristics of its participants. Organizational goals will be viewed as (1) the outcome of a bargaining influence process among organization participants, (2) determinants of the boundaries of the firm's decision-making and problem solving activities, and (3) their role in the internal control system.

The motivation of the participants and their degree of job satisfaction will be described in terms of their personal goals overlapping with the organization goals, and the extent to which the participants view the firm as being instrumental to the achievement of their personal goals. Finally, the firm's decision-making, problem-solving processes—its organization structure, division of labor, use of standard operating procedures, and so on—will be described as a function of its participant's problem-solving behavior, characterized by severe capacity limitations on their rationality.

Essentially, the firm is viewed as an equilibrium-seeking, decision-making system. Its goal composition may vary over time, but the adjustment process in the level of goals functions according to some simple rules. The firm operates under severe capacity limitations regarding problem solving and information retrieval. That is, the organizational system can recover only a limited fraction of past information and, furthermore, has limited capacity for processing information. As a result, there is great reliance on standard operating procedures and the use of simplifying devices for problem solving. Thus, stability is the outcome of a relatively stable set of goals and routinized problem-solving, decision-making procedures.

The organization achieves further stability through the accumulation of organizational slack. Organizational slack represents excess resources absorbed by the firm as a means to balance fluctuations in its external environment. It also, however, provides the means to satisfy the personal goals of the participants.

The organization members themselves are assumed to possess personal goals, a subset of which they expect to satisfy within the organization while also achieving the organizational goals. Thus, in general, managers are assumed to be motivated to achieve a goal set composed of aspirations for income, status, job security, and discretionary control over resources.

In the sections that follow, we will first discuss the nature and role of the firm's goals, a model of managerial motivation, the firm's decision-making system, and the role of organizational slack.<sup>3</sup>

## **THE FIRM'S GOALS**

In contrast to classical theories of management, traditional planning frameworks, or positive decision analysis, the goals of the firm cannot be assumed to be given or imposed. In theory, however, this could be the case in a firm owned and run by a single entrepreneur, in which case the unity between his goals and those of the firm could be accepted.

The large business firm, as we know it, can be described as representing a rather large constituency, often possessing conflicting objectives. The boundaries of the firm's coalition as demonstrated in Figure 1-2 simply depend on where they are drawn. They would include stockholders, bondholders, various managerial groups, labor unions, suppliers, customers, and increasingly, local, state and federal agencies through their legislative and regulatory powers.

It is not difficult to visualize the conflicting resource allocation demands made by the various members of the coalition. Stockholders have profit, dividend, and capital appreciation aspirations. Top management members' goals include maximizing their income (salary plus bonuses), status, job security, and so on. Labor unions represent their members' demands for increased wages, fringe benefits, and improved working conditions; and customers have expectations with regard to price, quality, and service.

If, in fact, organizational goals reflect the demands of an often conflicting coalition, then the following characterization of goals is evident:

1. Organizational goals cannot be described in terms of a joint preference-ordering function.
2. When agreement exists, it is on non-operationally defined goals.
3. Specific operational goals can be internally inconsistent with one another. They define a set of boundaries that must be satisfied by the organization.
4. Goals, whether operational or non-operational, are the outcome of bargaining processes.

Thus, the goal statements that emerge have two characteristics: (1) they do not require internal consistency, and (2) they vary in terms of prescription of

<sup>3</sup>These sections owe much to the ideas and concepts presented in Richard M. Cyert and James G. March, "The Behavioral Theory of the Firm," Prentice-Hall, 1963.

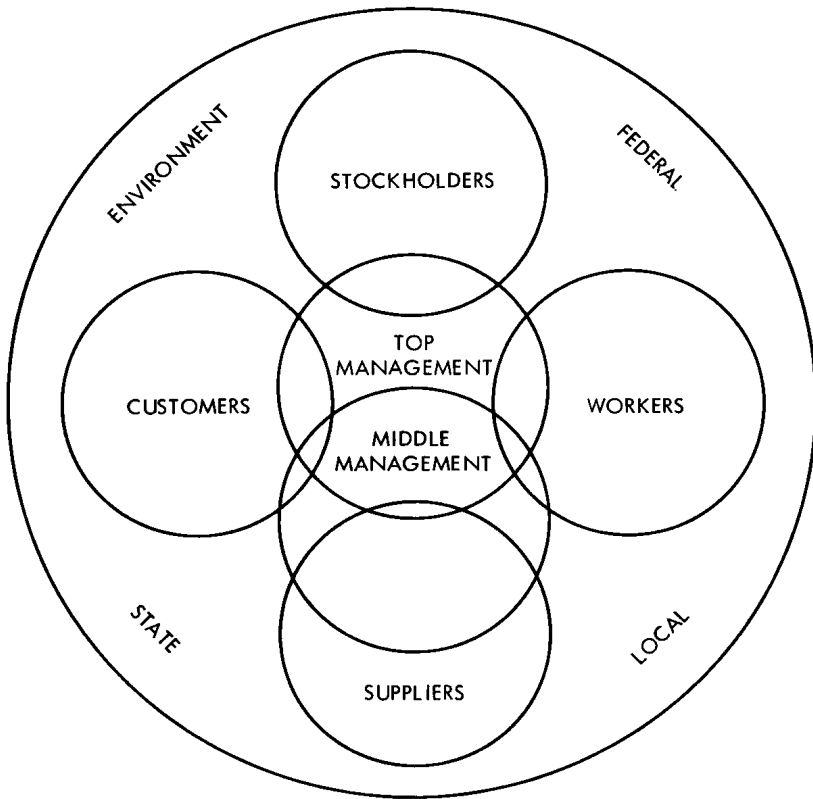


FIGURE 1-2 The Firm's Multigoal Relations

action and measures of success. This suggests, then, that the goal set may include superordinate statements with which every member of the coalition agrees but that such statements do not serve as criteria for action because they deliberately are devoid of any specifics. In a sense, the superordinate goals may be viewed as policy statements without the accompanying resource allocation plans. The superordinate goal, however, is important in the coalition formation process where a policy statement without indication of priorities on resources may be a sufficient inducement to a prospective coalition member. Thus, the relative importance of coalition members can be gauged from a comparison of the policy statements of the organization and its budget which reflects the resource allocation priorities.

The operational goals of the organization cannot be identified in the superordinate goal statement. The set of objectives that represent the subjective means to the goals are a series of level aspirations statements operationally defined. Examples would be market share objectives, profitability objectives, unit cost objectives, growth objectives, and so forth. These objectives are operational because they also define the performance measurement criteria. Thus, if the market share goal is 30 per cent, it is simple to compare the attained market share with the goal and determine whether performance on this criterion is acceptable. Another characteristic of the operational goals is that they focus the activities of the organization on specific objectives and direct attention to specific problems that have to be solved.

Although such a system appears unstable, because the bargaining process is never-ending, it is rather stable. Stability occurs because most of the bargaining

involves goal adjustments and not the alteration of the goal composition—the coalition.

Thus, goal adjustment is heavily precedent-dependent—last year's budget is the basis for next year's budget, and it is dependent on success or failure in achieving earlier goals. Success results in adjusting the goals upward, whereas failure to achieve prior goals may lead to maintaining or lowering the level of these goals.

The view of organizational goals, therefore, can be summarized as follows: The firm's goals are a complex compromise of conflicting demands reflecting the individual needs and goals of the firm's large and varied constituency. The makeup of the goals reflects the bargaining power and position of sub-coalitions within the firm, and consensus is generally reached on non-operational superordinate goals. Operational goals, however, as reflected in the firm's budget, determine the day-to-day course of action by the firm.

The role of operational goals—normally stated in level of aspiration form of  $G_j \geq X_j$  (where  $G$ = goals and  $X$  is a measure of performance for that goal)—is to identify the boundaries of the multiplicity of goals that the firm hopes to achieve over a time period. Simultaneously, however, these goals also serve as a control device for monitoring achievement against plans, and also serve to split the achievement of overall superordinate goals into a large number of smaller, more explicitly defined objectives.

Finally, it should be stressed that although we have described a conflict system, the firm only occasionally will be in conflict over what the makeup of the superordinate goals should be. For a firm beyond the start-up stage, and this takes in the great bulk of firms, the conflicts are about the levels of goals—the extent to which adjustments are made in the operational goals from one time period to the next.

## A MOTIVATIONAL MODEL OF MANAGERIAL BEHAVIOR

An examination of the literature on the motivational bases of organization participants reveals that most of the writing (theoretical and empirical) has been on the motivations of lower level participants. In addition, a number of theories exist that attempt to describe human motivation in general and that have been applied to organizational behavior. In this section, we will develop a view of the motivational bases of managerial behavior and evaluate it in terms of existing theories and empirical evidence reported in the literature.

A common view of individual behavior is that it is goal directed. This general principle underlies need theories<sup>4</sup> and level-of-aspiration type theories.<sup>5</sup> At any point in time, an individual can be considered to possess a personal goal set consisting of hopes, wishes, explicit objectives, and needs and drives. Individuals, because of differences in their personality, differ in terms of the degree to which their goal set is structured. In other words, an individual's personality, determined by such factors as his achievement motive, conformity proneness, need for affiliation, authoritarianism, dependence-independence motive, and power motive, are all related to the intensity of his goal-directed behavior. Generally, however, his

<sup>4</sup> See discussion in Timothy W. Costello, and Sheldon S. Zalkind, *Psychology in Administration A Research Orientation*, Prentice-Hall, 1963, pp. 55-122.

<sup>5</sup> See for example discussion in Victor H. Vroom, *Work and Motivation*, Wiley, 1964, pp. 3-45.



goal-directed behavior will have the characteristic that the arousal of drives or physiological needs can interrupt and take precedence over current goal-directed behavior and must be satisfied first. In addition, random disturbances or inability to achieve a goal can shift attention from one goal to another. Finally, goal directed behavior is sequential—the organism can pursue only one goal at a time—and achievement of a goal occurs when a satisfactory solution is obtained.

The implications of the above for organizational behavior are twofold. First, that an individual will expect to achieve only a sub-set of his goals within the organization. Secondly, that his behavior within the organization can be described in terms of a problem-solving, satisfying, sequential, personality-linked model. At this point, however, it is important to emphasize that an organization (the firm) is expected to be instrumental only in the achievement of some sub-set of the personal goals that an individual may have. Furthermore, an individual's decision to join an organization (or choose between organizations) would depend on his perception of the organization's instrumentality in the achievement of his personal goals. Similarly, job dissatisfaction would occur when the organization participant perceives that the organization ceases to be a means to his ends.<sup>6</sup>

We would like to consider next the personal goal dimensions that the firm can be expected to satisfy within its traditional framework but, specifically, from the manager's point of view. Following Williamson the sub-set of personal goals that a manager aspires to achieve within the firm, while achieving the organization goals, are wealth (income: salaries plus bonuses), staff (status), discretionary control over the allocation of resources, and job security.<sup>7</sup> The reality of the modern corporation, large or small, is that the higher up a manager advances in the firm, the greater his income, status, and discretionary decision making. Often this holds also for job security; on the other hand, the greater the discretionary component in decision making, the greater the risks, which could result in lower job security.

The four personal goal dimensions mentioned above represent an important component of an individual's personal goals. Income, in this model, stands for salary plus bonuses and for wealth in general. Status is normally a function of the level in the organization. It is a function of advancement and promotion and is a major form of recognition for achievement. Within the organization, it is formalized by status symbols (title, privileges, and so on) and usually correlated with size of staff and number of people being supervised. Discretionary control over the allocation of resources is a particularly appropriate goal dimension in a model of managerial motivation. It connotes the desire for and the degree to which a manager can influence the goals of the firm, set objectives, and choose between alternatives to achieve these objectives. In principle, all managerial and lower level jobs have a discretionary component as part of the behavior required of the job occupant. Indeed, much of the research on job satisfaction of production workers, first line supervisors, and clerical personnel has identified the lack of enough discretion as a major factor of job dissatisfaction. Accordingly, within the organization environment, the greater the discretionary control over resources a manager has, the greater the responsibility he has, and the more numerous his opportunities to experience personal growth and self-fulfillment.

Managers, therefore, can be expected to behave in a way that will maximize

<sup>6</sup>For a similar analysis based on inducement-contribution theory, see James G. March, and Herbert A. Simon, *Organizations*, Wiley, 1958, pp. 84-110.

<sup>7</sup>Oliver E. Williamson, *The Economics of Discretionary Behavior: Managerial Objectives in a Theory of the Firm*, Prentice-Hall, 1964, pp. 28-38.