

3

ORGANIZATIONAL GOALS¹

3.1 The Problem of Collective Goals

If we wish to develop a theory that predicts and explains business decision-making behavior, we face a problem that can be paraphrased in terms of the following:

1. People (i.e., individuals) have goals; collectivities of people do not.
2. To define a theory of organizational decision making, we seem to need something analogous — at the organization level — to individual goals at the individual level.

For the moment, let us accept this paraphrase (not everyone does). The theorist's problem is then to identify some concept of organization goals that is consistent with the apparent denial of their existence. Since (rightly or wrongly) individual goals are perceived as lodged in the individual human mind, the problem is to specify organizational goals without postulating an "organizational mind." In order to solve the problem we must (1) specify what an organization is in terms of the individual-organization dichotomy, (2) agree on the nature of the theoretical

¹This chapter is based extensively on R. M. Cyert and J. G. March, "A Behavioral Theory of Organizational Objectives," *Modern Organization Theory*, ed. M. Haire (New York: Wiley, 1959).

goals, and (3) identify a plausible solution to the theoretical problems. We will argue that there is substantial agreement on the first two requirements, but that the classic procedures for meeting the third requirement are deficient.

3.1.1 Conception of an organization

Let us view the organization as a coalition. It is a coalition of individuals, some of them organized into subcoalitions. In a business organization the coalition members include managers, workers, stockholders, suppliers, customers, lawyers, tax collectors, regulatory agencies, etc. In the governmental organization the members include administrators, workers, appointive officials, elective officials, legislators, judges, clientele, interest group leaders, etc. In the voluntary charitable organization there are paid functionaries, volunteers, donors, donees, etc.

Drawing the boundaries of an organizational coalition once and for all is impossible. Instead, we simplify the conception by focusing on the participants in a particular "region" — either temporal or functional. That is, over a specified (relatively brief) period of time we can identify the major coalition members; or, for a particular decision we can identify the major coalition members. More generally, for a certain class of decisions over a relatively long period of time we can specify the major classes of coalition members. As a result, we will be able to develop models of organizational decision making (for the short run) that pay only limited attention to the process by which the coalition is changed; but any such simplification involves some clear risks when we generalize to long-run dynamics.

This conception of an organization fits a number of recent formulations: the inducements-contributions schema, game theory, and the theory of teams. Each of these theories assumes a coalition of participants; each (with the exception of the inducements-contributions schema) assumes that by some procedure the coalition arrives at a statement of organization goals. However, the idea of an organization goal and the conception of an organization as a coalition are implicitly contradictory. Basic to the idea of a coalition is the expectation that the individual participants in the organization may have substantially different preference orderings (i.e., individual goals). That is to say, any theory of organizational goals must deal successfully with the obvious potential for internal goal conflict inherent in a coalition of diverse individuals and groups.

3.1.2 Classic devices for defining organization goals

There are two classic economic solutions to the problem of organization goals. The first, or entrepreneurial, solution is to describe an organization

as consisting of an entrepreneur (either the top of the managerial hierarchy or some external control group such as stockholders) and a staff. The goals of the organization are then defined to be the goals of the entrepreneur. Conformity to these goals is purchased by payments (wages, interest, love) made by the entrepreneur to the staff and by a system of internal control that informs the staff of the entrepreneurial demands. This solution to the problem is characteristic of the economic theory of the firm, some political theories of public bureaucracies, and most theories of management.

The second solution to the problem is to identify a common or consensual goal. This is a goal that is shared by the various participants in the organization. It may be *a priori* sharing, as in many theories of political institutions in which the goal of "public interest" or "social welfare" is introduced. It may be *a posteriori* sharing, as in some theories of small-group goal formation through discussion. In either case, conflict is eliminated through consensus.

Neither solution is entirely happy. Both attempt to define a joint preference ordering for the coalition. In our view, such attempts are misdirected. Actual organizational goals cannot normally be described in terms of a joint preference ordering. Studies of organizational objectives suggest that agreement on objectives is usually agreement on highly ambiguous goals.² Such agreement is undoubtedly important to choice within the organization, but it is far from the clear preference ordering usually assumed. The studies suggest further that behind this agreement on rather vague objectives there is considerable disagreement and uncertainty about subgoals, that organizations appear to be pursuing different goals at the same time.³ Finally, the studies suggest that most organization objectives take the form of an aspiration level rather than an imperative to "maximize" or "minimize," and that the aspiration level changes in response to experience.⁴

Unless we choose to ignore such observations, we need to reconsider our conceptions of objectives. Since the existence of unresolved conflict is a conspicuous feature of organizations, it is exceedingly difficult to construct a useful positive theory of organizational decision making if we insist on internal goal consistency. As a result, recent theories of organization objectives describe goals as the result of a continuous bargaining-learning process. Such a process will not necessarily produce consistent goals.

²D. B. Truman, *The Governmental Process* (New York: Knopf, 1951); A. D. H. Kaplan, J. B. Dirlam, and R. F. Lanzillotti, *Pricing in Big Business* (Washington, D.C.: Brookings Institution, 1958).

³Kaplan, *et al.*, *op. cit.*; P. Selznick, *TVA and the Grass Roots* (Berkeley: University of California Press, 1949).

⁴P. M. Blau, *The Dynamics of Bureaucracy* (Chicago: University of Chicago Press, 1955); R. M. Alt, "The Internal Organization of the Firm and Price Formation: An

3.2 The Goal Formation Process

In the theory to be outlined here, we consider three major ways in which the objectives of a coalition are determined. These are:

1. the bargaining process by which the composition and general terms of the coalition are fixed;
2. the internal organizational process of control by which objectives are stabilized and elaborated;
3. the process of adjustment to experience by which coalition agreements are altered in response to environmental changes.

3.2.1 Formation of coalition objectives through bargaining

A basic problem in developing a theory of coalition formation is that of handling side payments. It seems certain that the side payments by which organizational coalitions are formed do not satisfy the requirements of unrestricted transferability of utility. Side payments are made in many forms: money, personal treatment, authority, organization policy, and so forth. A winning coalition does not have a fixed booty that it then divides among its members. Quite to the contrary, the total value of side payments available for division among coalition members is a function of the composition of the coalition, and the total utility of the actual side payments depends on the distribution made within the coalition. There is no conservation of utility. For example, if we can imagine a situation in which any dyad is a viable coalition (e.g., a partnership to exploit the proposition that two can live more cheaply in coalition than separately), we would predict a greater total utility for those dyads in which needs were complementary than for those in which they were competitive.

Such a situation makes game theory as it currently exists virtually irrelevant for a treatment of organizational side payments,⁵ but the problem is in part even deeper than that. The second requirement of theories such as game theory, theory of teams, and inducements-contributions theory is that after the side payments are made, a joint preference ordering is defined. All conflict is settled by the side-payment bargaining. The employment-contract form of these theories, for example, assumes that the entrepreneur has an objective. He then purchases whatever services he needs to achieve the objective. In return for such payments employees contract to perform whatever is required of them — at least within the range of permissible requirements. For a price, the employee adopts the "organization" goal.

One feature of such a conception is that it describes a coalition asym-

⁵D. Luce and H. Raiffa, *Games and Decisions* (New York: Wiley, 1957), chaps. 7 and 10

metrically. To what extent is it arbitrary, in conventional accounting procedures, that we call wage payments "costs" and dividend payments "profit" rather than the other way around? Why is it that in our quasi-genetic moments we are inclined to say that in the beginning there was a manager and he recruited workers and capital? For the development of our own theory we make two major arguments. First, the emphasis on the asymmetry has seriously confused the understanding of organizational goals. The confusion arises because ultimately it makes only slightly more sense to say that the goal of a business organization is to maximize profit than to say that its goal is to maximize the salary of Sam Smith, Assistant to the Janitor.

Second, despite this, there are important reasons for viewing some coalition members as quite different from others. For example, it is clear that employees and management make somewhat different demands on the organization. In their bargaining, side payments appear traditionally to have performed the classical function of specifying a joint preference ordering. In addition, some coalition members (e.g., many stockholders) devote substantially less time to the particular coalition under consideration than do others. It is this characteristic that has been used to draw organizational boundaries between "external" and "internal" members of the coalition. Thus, there are important classes of coalition members who are passive most of the time. A condition of such passivity is that the payment demands they make be of such a character that most of the time they can be met rather easily.

Although we thereby reduce substantially the size and complexity of the coalition relevant for most goal setting, we are still left with something more complicated than an individual entrepreneur. It is primarily through bargaining within this active group that what we call *organizational objectives* arise. Side payments, far from being the incidental distribution of a fixed, transferable booty, represent the central process of goal specification. That is, a significant number of these payments are in the form of policy commitments.

The distinction between demands for monetary side payments and demands for policy commitments seems to underlie management-oriented treatments of organizations. It is clear that in many organizations this distinction has important ideological connotations. Indeed, the breakdown of the distinction in our generation has been quite consistently violent. Political party machines in this country have changed drastically the ratio of direct monetary side payments (e.g., patronage, charity) to policy commitments (e.g., economic legislation). Labor unions are conspicuously entering into what has been viewed traditionally as the management prerogatives of policy making and demanding payments in that area. Military officers have given us the substance — if not entirely the pretense

— of being simply hired agents of the regime. The phenomenon is especially obvious in public⁶ and voluntary⁷ organizations, but all organizations use policy side payments. The marginal cost to other coalition members is typically quite small.

This trend toward policy side payments is especially noticeable in contemporary organizations, but the important point is that we have never come close to maintenance of a sharp distinction in the kinds of payments made and demanded. Policy commitments have (one is tempted to say *always*) been an important part of the method by which coalitions are formed. In fact, an organization that does not use such devices can exist in only a rather special environment.

To illustrate coalition formation under conditions where the problem is not scarce resources for side payments but varying complementarities of policy demands, imagine a nine-man committee appointed to commission a painting for the village hall. The nine members make individually the following demands:

- A: The painting must be an abstract monotone.
- B: The painting must be an impressionistic oil.
- C: The painting must be small and oval in shape.
- D: The painting must be small and in oil.
- E: The painting must be square in shape and multicolored.
- F: The painting must be an impressionistic square.
- G: The painting must be a monotone and in oil.
- H: The painting must be multicolored and impressionistic.
- I: The painting must be small and oval.

In this case each potential coalition member makes two simple demands. Assuming that five members are all that are required to make the decision, there are three feasible coalitions: A, D, C, and I can form a coalition and commission a small, oval, monotone, oil abstract; B, C, D, H, and I can form a coalition and commission a small, oval, multicolored, impressionistic oil; B, D, E, F, and H can form a coalition and commission a small, square, multicolored, impressionistic oil.

Committeeman D, it will be noted, is in the admirable position of being included in every possible coalition. The reason is clear; his demands are completely consistent with the demands of everyone else.

Obviously, at some level of generality the distinction between money and policy payments disappears because any side payment can be viewed

⁶R. A. Dahl and C. E. Lindblom, *Politics, Economics, and Welfare* (New York: Harper, 1953); H. A. Simon, D. W. Smithburg, and V. A. Thompson, *Public Administration* (New York: Knopf, 1950).

⁷D. L. Sills, *The Volunteers* (Glencoe, Ill.: Free Press, 1957); S. L. Messinger, "Organizational Transformation: A Case Study of a Declining Social Movement," *American*

as a policy constraint. When we agree to pay someone \$35,000 a year, we are constrained to the set of policy decisions that will allow such a payment. Any allocation of scarce resources (such as money) limits the alternatives for the organization. However, the scarcity of resources is not the only kind of problem. Some policy demands are strictly inconsistent with other demands. Others are completely complementary. To be sure, the problems of policy consistency are in principle amenable to explicit optimizing behavior, but they add to the computational difficulties facing the coalition members and make it even more obvious why the bargaining leading to side payment and policy agreements is only slightly related to the bargaining anticipated in a theory of omniscient rationality.

In the process of bargaining over side payments, many of the organizational objectives are defined or clarified. Because of the form the bargaining takes, the objectives tend to have several important attributes:

1. They are imperfectly rationalized. The extent to which the new demands will be tested for consistency with existing policy will depend on the skill of the leaders involved, the sequence of demands leading to the new bargaining, the aggressiveness of various parts of the organization, and the scarcity of resources. This testing is normally far from complete.

2. Some objectives are stated in the form of aspiration-level constraints. This occurs when demands that are consistent with the coalition are thus stated; for example: "We must allocate ten per cent of our total budget to research."

3. Some objectives are stated in a nonoperational form. In our formulation such objectives arise when potential coalition members have demands that are nonoperational or demands that can be made nonoperational. The prevalence of objectives in this form can be partly explained by the fact that nonoperational objectives are consistent with virtually any set of objectives.

3.2.2 Stabilization and elaboration of objectives

The bargaining process goes on more or less continuously, turning out a long series of commitments — but a description of goal formation in such terms alone is not adequate. Organizational objectives are, first of all, much more stable than would be suggested by such a model, and second, such a model does not handle satisfactorily the elaboration and clarification of goals through day-to-day bargaining.

Human beings have limited capacities and limited time to devote to any particular aspect of the organizational system; such limitations constrain the bargaining process. Let us return to our conception of a coalition having monetary and policy side payments. These side-payment agreements are incomplete. They do not anticipate effectively all possible future situations

and they do not identify all considerations that might be viewed as important by the coalition members at some future time. Nevertheless, the coalition members are motivated to operate under the agreements and to develop some mutual control-systems for enforcing them.

One such mutual control-system in many organizations is the budget. A budget is an explicit elaboration of previous commitments. Although it is usually viewed as an asymmetric control-device (i.e., a means for superiors to control subordinates), it is clear that it represents a form of mutual control — just as there are usually severe costs to the department in exceeding the budget, so also are there severe costs to other members of the coalition if the budget is not paid in full. As a result, budgets in every organization tend to be self-confirming (see Chapter 5).

A second major, mutual control-system is the allocation of functions. Division of labor and specialization are commonly treated in management textbooks simply as techniques of rational organization. If, however, we consider the allocation of functions in much the way we would normally view the allocation of resources during budgeting, a somewhat different picture emerges. When we define the limits of discretion, we constrain the individual or subgroup from acting outside those limits; but at the same time, we constrain any other members of the coalition from prohibiting action within those limits. Like the allocation of resources in a budget, the allocation of discretion in an organization chart is largely self-confirming.

The secondary bargaining involved in such mutual control-systems serves to elaborate and revise the coalition agreements made on entry.⁸ In the early life of an organization, or after some exceptionally drastic organizational upheaval, this elaboration occurs in a context where relatively deliberate action must be taken on everything from pricing policy to paper clip policy. Reports from individuals who have lived through such early stages emphasize the lack of structure that typifies settings for day-to-day decisions.⁹

In most organizations most of the time, however, the elaboration of objectives occurs within much tighter constraints. Much of the structure is taken as given. This is true primarily because organizations have memories — in the form of precedents, and individuals in the coalition are strongly motivated to accept the precedents as binding. Whether precedents are formalized in the shape of an official standard operating procedure or are less formally stored, they remove from conscious consideration many agreements, decisions, and commitments that might well be subject to renegotiation in an organization without a memory (see Chapter 5). Past

⁸J. D. Thompson and W. J. McEwen, "Organizational Goals and Environment: Goal-setting as an Interactive Process," *American Sociological Review*, 23 (1958), 23-31.

⁹H. A. Simon, "The Birth of an Organization: The Economic Cooperation Adminis-

bargains become precedents for present situations; a budget becomes a precedent for future budgets; an allocation of functions becomes a precedent for future allocations. Through all the well-known mechanisms, the coalition agreements of today are institutionalized into semipermanent arrangements. A number of administrative aphorisms come to mind: an unfilled position disappears; see an empty office and fill it up; there is nothing temporary under the sun. As a result of organizational precedents, objectives exhibit much greater stability than would typify a pure bargaining situation. The "accidents" of organizational genealogy tend to be perpetuated.

3.2.3 Changes in objectives through experience

Although considerably stabilized by internal processes, the demands made on the coalition by individual members do change with experience. Both the nature of the demands and their quantitative level vary over time.

Since many of the requirements specified by individual participants are in the form of attainable goals rather than general maximizing constraints, objectives are subject to the usual phenomena associated with aspiration levels. As an approximation to the aspiration-level model, we can take the following set of propositions:

1. In the steady state, aspiration level exceeds achievement by a small amount.
2. Where achievement increases at an increasing rate, aspiration level will exhibit short-run lags behind achievement.
3. Where achievement decreases, aspiration level will be above achievement.

These propositions derive from a set of assumptions requiring that current aspiration be an optimistic extrapolation of past achievement and past aspiration. Although such assumptions are sometimes inappropriate, the model seems to be consistent with a wide range of human goal-setting behavior.¹⁰ Two kinds of achievement are, of course, important. The first is the achievement of the participant himself. The second is the achievement of others in his reference group.¹¹

Because of these phenomena, our theory of organizational objectives must allow for drift in the demands of members of the organization. No one doubts that aspirations with respect to monetary compensation vary substantially as a function of payments received — so do aspirations regarding advertising budget, quality of product, volume of sales, product

¹⁰K. Lewin, T. Dembo, L. Festinger, and P. Sears, "Level of Aspiration," in *Personality and the Behavior Disorders*, ed. J. M. Hunt (New York: Ronald, 1944), vol. 1.

¹¹L. Festinger, "A Theory of Social Comparison Processes," *Human Relations*, 7 (1954), 117-140.

mix, and capital investment. Obviously, until we know a great deal more than we now do about the parameters of the relation between achievement and aspiration, we can make only relatively weak predictions. However, some of these predictions are quite useful, especially in conjunction with search theory (see Chapter 4).

The nature of the demands also changes with experience in another way. We do not conceive that individual members of the coalition will have a simple listing of demands, with only the quantitative values changing over time. Instead we imagine each member as having a rather disorganized file case full of demands. At any point in time, the member attends to only a rather small subset of his demands, the number and variety depending again on the extent of his involvement in the organization and on the demands of the other commitments on his attention.

Since not all demands receive attention at the same time, one important part of the theory of organizational objectives is to predict when particular units in the organization will attend to particular goals. Consider the safety goal in a large corporation. For the safety engineers this is an important goal most of the time. Other parts of the organization rarely even consider it. If, however, the organization has some drastic experience (e.g., a multiple fatality), attention to a safety goal is much more widespread and safety action quite probable (see Chapter 4).

Whatever the experience, it shifts the attention focus. In some cases (as in the safety example), adverse experience suggests a problem area to be attacked. In others, solutions to problems stimulate attention to a particular goal. An organization with an active personnel-research department will devote substantial attention to personnel goals, not because it is necessarily an especially pressing problem but because the subunit keeps generating solutions that remind other members of the organization of a particular set of objectives they profess.

The notion of attention focus suggests one reason why organizations are successful in surviving with a large set of unrationalized goals. They rarely see the conflicting objectives simultaneously. For example, consider the case of a common pair of organizational demands within business organizations, the demands for: (1) specific tailoring of product specifications and delivery times to individual customer needs — primarily from the sales department and customers; (2) product standardization and delivery times consistent with production smoothing — primarily from the production department and cost analysts. In large part, these demands are logically inconsistent; one is satisfied at the expense of the other. They cannot both be completely satisfied simultaneously. However, since the probability is low that both of these demands will be made simultaneously, the organization can remain viable by attending to the demands sequentially.

The sequential attention to goals is a simple mechanism. A consequence of the mechanism is that organizations ignore many conditions that outside observers see as direct contradictions. They are contradictions only if we imagine a well-established, joint preference ordering or omniscient bargaining. Neither condition exists in an organization. If we assume that attention to goals is limited, we can explain the absence of any strong pressure to resolve apparent internal inconsistencies. This is not to argue that all conflicts involving objectives can be resolved in this way, but it is one important mechanism that deserves much more intensive study.

3.2.4 Organizational slack

In terms of the present framework, an organizational coalition is viable if the payments made to the various coalition members are adequate to keep them in the organization. If resources exist to meet all demands and those resources are distributed so as to meet demands, the coalition is a feasible one. Since demands adjust to actual payments and alternatives external to the organization, there is a long-run tendency for payments and demands to be equal. In this sense, what we have called *coalition demands* are analogous to the factor prices of a more conventional view of the firm.

There is a critical difference, however. In the present theory we focus on the short-run relation between payments and demands and on the imperfections in factor markets. The imperfections, in fact, dominate the behavior. The imperfections are dominant for three primary reasons:

1. As we have already noted, payments and demands are in the form of a variety of money payments, perquisites, policies, personal treatments, and private commitments. As a result, information on actual factor "prices" is hard to obtain, easily misinterpreted, and often unreliable.
2. Information about the "market" is not obtained automatically; it must be sought. Typically, the participants in the organization do not seek information until stimulated to do so by some indication of failure.
3. Adaptations in demands are slow — even in the face of strong pressure.

Because of these frictions in the mutual adjustment of payments and demands, there is ordinarily a disparity between the resources available to the organization and the payments required to maintain the coalition. This difference between total resources and total necessary payments is what we have called *organizational slack*. Slack consists in payments to members of the coalition in excess of what is required to maintain the organization. Many interesting phenomena within the firm occur because slack is typically not zero.

In conventional economic theory slack is zero (at least at equilibrium). In treatments of managerial economics, attention is ordinarily focused on only one part of slack — payments to owners — and it is assumed that other slack is maintained at zero. Neither view is an especially accurate portrayal of an actual firm. Many forms of slack typically exist: stockholders are paid dividends in excess of those required to keep stockholders (or banks) within the organization; prices are set lower than necessary to maintain adequate income from buyers; wages in excess of those required to maintain labor are paid; executives are provided with services and personal luxuries in excess of those required to keep them; subunits are permitted to grow without real concern for the relation between additional payments and additional revenue; public services are provided in excess of those required.

From time to time virtually every participant in any organization obtains slack payments. However, some participants ordinarily obtain a greater share of the slack than do other participants. In general, we would expect that members of the coalition who are full-time, in a position to perceive potential slack early, or have some flexibility in unilateral allocation of resources will tend to accumulate more slack than will other members. Although we have not attempted to pursue in detail the implications of such differential distribution of slack within the organization, the general model presented in Chapter 8 distinguishes between two kinds of organizational slack (essentially slack in the marketing-sales functions on the one hand and slack in the production function on the other) that are related by their mutual dependence on external conditions but are partially independent.

In most cases we have used the organizational slack concept not to explain differential payments but as a hypothetical construct for explaining over-all organizational phenomena. In particular, it seems to be useful in dealing with the adjustment of firms to gross shifts in the external environment. For example, consider what happens when the rate of improvement in the environment is great enough so that it outruns the upward adjustment of aspirations. In a general way, this seems to be the situation that faces business firms during strong boom periods. When the environment outruns aspiration-level adjustment, the organization secures, or at least has the potential of securing, resources in excess of its demands. Some of these resources are simply not obtained — although they are available. Others are used to meet the revised demands of those members of the coalition whose demands adjust most rapidly — usually those most deeply involved in the organization. The excess resources would not be subject to general bargaining because they do not involve allocation in the face of scarcity.

When the environment becomes less favorable, organizational slack

represents a cushion. Resource scarcity brings on renewed bargaining and tends to cut heavily into the excess payments introduced during plush times. It does not necessarily mean that precisely those demands that grew abnormally during better days are pruned abnormally during poorer ones, but in general we would expect this to be approximately the case. More important, the cushion provided by organizational slack permits firms to survive in the face of adversity. Under the pressure of a failure (or impending failure) to meet some set of demands on the coalition, the organization discovers some previously unrecognized opportunities for increasing the total resources available. For example, M. W. Reder reports that after losses of about fifty million dollars for the first three quarters of 1946, the Ford Motor Company "announced that it had found methods of reducing operating costs (on a given volume of output) by about twenty million dollars per year."¹²

Organizational slack absorbs a substantial share of the potential variability in the firm's environment. As a result, it plays both a stabilizing and adaptive role. We have already noted that the demands of participants adjust to achievement. Aspiration-level adjustment, however, tends to be a relatively slow process — especially downward adjustment. If the only adaptive devices available to the organization were adjustments in aspirations of the members of the coalition, the system would be quite unstable in the face of an environment of even moderate fluctuation. Slack operates to stabilize the system in two ways: (1) by absorbing excess resources, it retards upward adjustment of aspirations during relatively good times; (2) by providing a pool of emergency resources, it permits aspirations to be maintained (and achieved) during relatively bad times.

This is not to argue that slack is deliberately created for such a stabilizing purpose; in fact, it is not. Slack arises from the bargaining and decision process we have described, without conscious intent on the part of the coalition members to provide stability to the organization. In a sense, the process is reinforced because it "works" and it "works" partly because it generates slack, but we have seen no significant evidence for the conscious rationalization of slack in business firms. From the point of view of a behavioral theory of the firm, however, the critical question is whether predictions based on the concept can be verified. For example, we would predict that the costs of firms that are successful in the market place will, *ceteris paribus*, tend to rise. Such predictions are susceptible to more or less direct test.¹³ They also are tested by testing more complicated models of which they form a part (see Chapter 5).

¹²M. W. Reder, "A Reconsideration of Marginal Productivity Theory," *Journal of Political Economy*, 55 (1947), 450-458.

¹³R. M. Cyert and J. G. March, "Organizational Factors in the Theory of Oligopoly," *Quarterly Journal of Economics*, 70 (1956), 44-46.

3.2.5 Constructing a predictive theory

Before the general considerations outlined above can be transformed into a useful predictive theory, a considerable amount of precision must be added. The introduction of precision depends, in turn, on the future success of research into the process of coalition formation. Nevertheless, some steps can be taken now to develop the theory. In particular, we can specify a general framework for a theory and indicate its needs for further development.

We assume a set of coalition members, actual or potential. Whether these members are individuals or groups of individuals is unimportant. Some of the possible subsets drawn from this set are viable coalitions. That is, we will identify a class of combinations of members such that any of these combinations meet the minimal standards imposed by the external environment of the organization. Patently, therefore, the composition of the viable set of coalitions will depend on environmental conditions.

For each of the potential coalition members we require a set of demands. Each such individual set is partitioned into an active part currently attended to and an inactive part currently ignored. Each demand can be characterized by two factors: (1) its marginal resource requirements, given the demands of all possible other combinations of demands from potential coalition members; (2) its marginal consistency with all possible combinations of demands from potential coalition members.

For each potential coalition member we also require a set of problems, partitioned similarly into an active and an inactive part.

This provides us with the framework of the theory. In addition, we need five basic mechanisms:

1. A mechanism that changes the quantitative value of the demands over time. In our formulation, this becomes a version of the basic aspiration-level and mutual control theory outlined earlier.

2. An attention-focus mechanism that transfers demands among the three possible states: active set, inactive set, not-considered set. We have said that some organizational participants will attend to more demands than other participants and that for all participants some demands will be considered at one time and others at other times, but we know rather little about the actual mechanisms that control this attention factor.

3. A similar attention-focus mechanism for problems. As we have noted, there is a major interaction between what problems and what demands are attended to, but research is also badly needed in this area.

4. A demand-evaluation procedure that is consistent with the limited capacities of human beings. Such a procedure must specify how demands are checked for consistency and for their resource demands. Presumably

such a mechanism will depend heavily on a rule that much of the problem be taken as given and only incremental changes considered.

5. A mechanism for choosing among the potentially viable coalitions. In our judgment, this mechanism will probably look much like the recent suggestions of game theorists that only small changes be evaluated at a time.¹⁴

Given these five mechanisms and some way of expressing environmental resources, we can describe a process for the determination of objectives in an organization that will exhibit the important attributes of organizational goal determination. At the moment, we can approximate some of the required functions. For example, it has been possible to introduce into several models substantial parts of the first four mechanisms (see Chapters 5, 7, 8, and 9).

3.3 Business Goals and Price and Output Decisions

Suppose we wish to use the general considerations noted above to construct a model of organizational decision making by a business firm determining price, output, and general sales strategy. As we have already noted, we are not yet in a good position to develop a theory that focuses intensively on the formation of objectives through bargaining and coalition formation (rather than on the revision of such objectives and selective attention to them). As a result, when we look at price and output determination in business firms, we do three things:

1. We assume a small set of operational goals. In making such an assumption we suggest that the demands of many parts of the coalition are not operative for this class of decisions most of the time or are substantially satisfied when the set of goals assumed is satisfied.

2. We assume that this set of goals is fixed in the sense that no other classes of goals will arise within the coalition. Such an assumption does not exclude changes in the levels of the goals nor in the attention directed at specific goals within the set.

3. We attempt to determine by empirical investigation what specific goals ordinarily enter into the price and output decisions. In general, we have observed that we can represent organizational goals reasonably well by using about five different goals. In any organization, other considerations sometimes arise. For example, governmental demands occasionally become of prime importance. In a few organizations other considerations are as important as those we have identified. For example, in some organizations considerations of prestige or tradition are major goal factors. However, for most price, output, and general sales strategy decisions in

¹⁴D. Luce and H. Raiffa, *op. cit.*

most organizations, we think we can limit our primary attention to five goals.

We list the five goals here in an arbitrary order without attempting to establish any necessary order of importance; most of the time no order of importance is required. All goals must be satisfied. However, it should be clear in the models we will present in later chapters that there is an implicit order in the models reflected in the way in which search activity takes place and in the speed and circumstances of goal-level change. These latent priorities appear to vary from organization to organization in a way that is not clear. It seems most probable that their variation should be explained in terms of differences in the bargaining position of the several participants in the coalition either current or historical, but at present we treat the implicit priorities simply as organizational parameters.

3.3.1 Production goal

We assume that an organization has a complex of goals surrounding the production operation. These can be summarized in terms of a production goal. Such a goal has two major components. The first is a smoothing goal: we do not want production to vary more than a certain amount from one time period to another. The second is a level-of-production goal: we want to equal or exceed a certain production level. These two components can be summarized in terms of a production range: we want production to fall within a range of possible production.

The production goal represents in large part the demands of those coalition members connected with production. It reflects pressures toward such things as stable employment, ease of scheduling, development of acceptable cost performance, and growth. Thus, the goal is most frequently evoked in the production part of the organization and is most relevant to decisions (e.g., output) made in that part.

3.3.2 Inventory goal

We assume certain aspirations with respect to finished-goods inventory levels. As in the case of the production goal, the inventory goal summarizes a number of pressures, most conspicuously the demands of some participants to avoid runouts in inventory and to provide a complete, convenient source of inventoried materials. We summarize these demands in terms of either an absolute level of inventory goal or an inventory range (in which case we also attend to demands to avoid excessive inventory costs).

The inventory goal reflects the demands of those coalition members connected with inventory. Primarily, thus, it builds on the pressures of the inventory department itself, salesmen, and customers. Since the inventory

serves essentially as a buffer between production and sales, the goal is evoked most frequently and is most relevant to decisions in the output and sales areas.

3.3.3 Sales goal

We assume that most participants in business firms believe the firm must sell produced goods in order to survive. Thus, various members of the coalition make demands that the organization meet some general criteria of sales effectiveness. The sales goal and the market share goal (below) summarize these demands. In addition, the sales department itself (and the personnel in it) link subunit goals with sales. The sales goal is simply an aspiration with respect to the level of sales. It may be in terms of dollars, units, or both.

The sales goal represents primarily the demands of those members of the coalition closely connected with sales and secondarily those members of the coalition who view sales as necessary for the stability of the organization. The goal is most frequently evoked and is most relevant to decisions with respect to sales strategy.

3.3.4 Market share goal

The market share goal is an alternative to the sales goal insofar as the concern is for a measure of sales effectiveness. Either or both may be used, depending on the past experience of the firm and the traditions of the industry. In addition, the market share goal is linked to the demands of those parts of the organization that are primarily interested in comparative success (e.g., top management, especially top sales management) and to the demands for growth.

Like the sales goal, the market share goal is most frequently evoked and most relevant to sales strategy decisions.

3.3.5 Profit goal

We assume that the business firm has a profit goal. This goal is linked to standard accounting procedures for determining profit and loss. It summarizes the demands for two things: (1) demands for accumulating resources in order to distribute them in the form of capital investments, dividends to stockholders, payments to creditors, or increased budgets to subunits; (2) demands on the part of top management for favorable performance measures. In general, we assume that the profit goal is in terms of an aspiration level with respect to the dollar amount of profit. In principle, of course, this goal might also take the form of profit share or return on investment.

The profit goal reflects the pressure of those parts of the coalition that

share in the distribution of profits and in the distribution of credit for profitability. Thus, in general, this pressure comes from top-level managers throughout the firm, from stockholders, creditors, and from those parts of the organization seeking capital investment. The goal is usually most closely linked to pricing and resource allocation decisions.

Although such a specification of goals deviates substantially from the conventional theory of the firm, it will not necessarily satisfy anyone who would like to reflect all of the goals that might conceivably be of relevance to price, output, and sales strategy decisions. Without insisting on the necessary efficacy of five goals, we think a strong case can be made for expanding the set of goals beyond that represented by the conventional theory, and even beyond the elaboration suggested by Baumol.¹⁵ We also think that expanding the list of assumed goals much beyond the present list rapidly meets a point of diminishing returns. In the models presented in later chapters we restrict attention to this list of goals; in some cases a subset of goals seems satisfactory.

3.4 Summary

We have argued that the goals of a business firm are a series of more or less independent constraints imposed on the organization through a process of bargaining among potential coalition members and elaborated over time in response to short-run pressures. Goals arise in such a form because the firm is, in fact, a coalition of participants with disparate demands, changing foci of attention, and limited ability to attend to all organizational problems simultaneously.

In the long run, studies of the goals of a business firm must reflect the adaptation of goals to changes in the coalition structure. Except for some dramatic shifts, however, such changes are quite gradual, and it is possible to construct reasonable, short-run models in which a few specific types of goals are taken as given (subject to aspiration-level changes). With respect to the contemporary firm — and price, output, and sales strategy decisions — we have argued that we can identify five major goals: production, inventory, sales, market share, and profit. These goals, or a subset of them, are postulated in the models presented in later chapters (see Chapters 5, 7, 8, 9, and 10).

Finally, we have argued that, because of the form of the goals and the way in which they are established, conflict is never fully resolved within an organization. Rather, the decentralization of decision making (and goal attention), the sequential attention to goals, and the adjustment in organizational slack permit the business firm to make decisions with inconsistent goals under many (and perhaps most) conditions.

¹⁵W. J. Baumol. *Business Behavior. Value and Growth*. (New York: Macmillan, 1959).