

Power and Profit in Hierarchical Organisations

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The development of economics as a social science has rested on two postulates concerning human behavior: individuals act out of self interest, and are rational. Thus, consumers are assumed to maximize their utility; entrepreneurs maximize profit. The economy is driven by self interest, the corporation by the profit motive.

Recently the postulates of rationality and self interest have been extended to the study of political science through the development of the public choice area. In one of the pioneering works in this area Anthony Downs (1957) postulated that candidates pursued their self interest by trying to maximize the number of votes they obtained. Although vote maximization has proven to be a plausible and useful assumption to explain candidate behavior, it clearly cannot explain all political behavior, since many politicians are not elected and/or cannot be re-elected. In particular, this postulate cannot explain bureaucratic behavior.

The classic analysis of bureaucracy is, of course, Max Weber's (1947) and the natural objective for the bureaucrat, following Weber, would be power. The large corporation is run by managers seeking profit; the public bureaucracies by individuals hunting for power. Economic man pursues profit; political man power.

In the pages which follow I attempt to develop an analogy between power and profit, and use it to analyse the objectives and conflicts that arise in hierarchical organizations. Since the literatures on both of these subjects are long and tortuous, I make only selective reference to each. Let us begin with power.

I. The Concept of Power

At the most intuitive level the word "power" connotes the ability or capacity to do something, see Wagner (1969, pp 3-4). But "something" can stand for a variety of objects, each of which leads to a different conception of power. Physical power is the ability to apply force. Economic power is

the capacity to purchase goods, and so on. Political power must be defined as the ability to achieve certain ends through a political process. In this essay we shall take a rather broad view of the latter, considering virtually any collective decision-making body or organization from a committee to a bureaucracy as being governed by some form of political process. To observe the exertion of political power it is necessary that at least some participants in the political process have conflicting goals. If all members of a committee favor the same alternative as *A* and this alternative is chosen we cannot say that *A* has exercised power. If only *A* favors an alternative and it is chosen, *A* has political power.

Political power can arise directly from the rules by which the political process operates. These rules might simply grant *A* a dictatorial right. Under most rules, the committee chairman has more capacity to influence the outcome than other members, yet he need not be the most powerful member of the committee. What interests us here is not the direct capacity to influence an outcome granted by the rules, but the differing capacities individuals have to influence a collective decision, independent of the set of rules.

Bertrand Russell (1938) listed three ways in which an individual can exert influence in a political context (1) by direct physical power, e.g. imprisonment or death, (2) by offering rewards and punishments, and (3) by exerting influence on opinion through the use of education and propaganda. The first two are obviously closely related to procedural power. The dictator may have authority to imprison or execute subordinates, they most certainly will not have similar legal authority over him. As Cartwright (1965, p 139) has observed, "Of the many possible means of influence, persuasion is commonly advocated as most suited to a democratic, or rational, social system". Thus, the third of Russell's sources of influence is of most interest to us here. On the surface, it also

seems to come closest to our description of power. For education, propaganda, and persuasion are all forms of information. As we shall attempt to demonstrate, political power, other than of a procedural kind, is possessed by those who have information. Uncertainty creates the potential to exercise power, information provides the capacity to do so.

Although information will provide the most power in a political process governed by persuasion, it is not limited to these most democratic forms of political interaction. To illustrate the generality of the uncertainty-information-power nexus we first examine a situation that seems to come closest to Russell's first source of influence, pure physical power. Consider the classic power struggle encapsulated by the demand "your money or your life". *G* has a loaded gun which he aims at *W* and demands that *W* give his loaded wallet over to *G*. Here we have what appears to be the simplest case of power by force with information playing no visible role. Let us examine more closely. *W* must choose whether to hand over his wallet or not. He must, therefore, predict what *G* will do should he not hand it over and if he does. Suppose *W* knows that *G* will not shoot in either event, *G* is then without any power. *W* keeps his wallet and *G* does not shoot. Suppose *W* knows *G* will shoot in either event. Again *G* is without power, i.e. the ability to command, since *W* knows the wallet now belongs to *G*, and it is simply up to *W* to decide whether he wants to give it to *G* and then be shot, or let him take it after *W* is dead. The same holds true for the case when *G* will shoot if he does not get the wallet, but will not shoot if he gets it. If *W* knows this with certainty, suppose *G* is a programmed robot, *G* is without any real power to command. The choice is *W*'s, whether to live without his wallet or die with it, and *G* merely carries out his programmed action following the real decision by *W*. The only situation in which *G* can actually command *W* to do something against his will, is when *W* does not know what *G* will do following *W*'s action. *W* might then give *G* the wallet when *G* would not have shot him anyway.

It is in this situation, and really only in this situation, that *G* can be said to be exercising political power over *W*, as political power is typically defined, see Dahl (1957, p 80), Simon (1953). If *G* would not shoot *W* if *W* failed to give him the wallet, and yet he can get *W* to give him the wallet, he has succeeded to get *W* to do something he would not otherwise have done. *G* has done so,

however, not solely because he has a gun, but because *W* is uncertain about what *G* will do with the gun. It is not the presence of the gun *per se*, but the uncertainty that accompanies it that gives *G* power. In the absence of the gun, *G* does not have power over *W* because *W* is not worried that *G* will kill him. If *G* gets a gun, he will have power over *W*, because, or more precisely if and only if, *W* is uncertain about what *G* will do with it. *G* has power because he has the information about what he will do and *W* does not.

In this example, the gun plays the role of procedural power and clearly it places *G* in a better position to achieve his goals than *W*. But it alone does not determine the outcome so long as there is uncertainty on the part of the individual to the other's reactions. It is this uncertainty that gives *G* power over *W*, and can give *W* some power over *G*.

The importance of uncertainty and information can be further demonstrated by slightly changing the example. Suppose that *W* has buried the wallet someplace in his yard and only he knows the location. Now there is considerable uncertainty on both sides: *W* not knowing whether he will get shot, *G* not knowing the location of the wallet. Given the increase in uncertainty and relevant information in the hands of *W* his power should be enhanced. He can now quite possibly force *G* to unload or throw away his gun in exchange for information on the wallet's location. Indeed, he might get off with both his life and his wallet. Even though the advantage of force still lies on the side of *G*, the increase in *W*'s possession of relevant information gives him the potential for exercising considerably more power over *G*.

As a final extreme example, assume *G* and *W* both have wallets and known programmed response patterns in the event that one has a gun. A gun is given to one on a flip of a coin. Given the programmed reactions of each, no real power is meted out via the coin flip, although the flip will affect the lives and/or wealth of *W* and *G*. What power that exists in the situation is with the coin flipper, or a fate which knows the outcome of the flip.

Returning to Russell's list of sources of power, we can see that it is the uncertainty that surrounds a dictator's use of physical power, or a supervisor's issuance of rewards and punishments that allows them to control their subordinates. If *B* knows with certainty that *A* will give him a reward if *B* does *X*, the rules require it, then *B* in carrying out *X* exercises as much power over *A* as *A* does

over *B*. In a bureaucracy in which no uncertainty existed, lines of authority might exist, but no real power would accompany authority. All employees would know all of the possible events that might occur and all could predict the eventual outcomes or decisions that would follow each. Employee grievance procedures would be completely codified and both the supervisor's and the employee's reaction to any situation would be perfectly predictable. In a world of complete certainty, all individuals are essentially acting out a part, "going by the rules", and those at the top of the bureaucracies are as devoid of discretionary power as those at the bottom. All power is purely procedural, see Simon (1953, p 72).

This type of situation comes close to the conditions existing in the French Monopoly Michel Crozier (1964) described in *The Bureaucratic Phenomenon*. As Crozier depicts it the monopoly does operate in a world of certainty – with one exception – the machines sometimes break down. This places the women operating the machines completely under the power of the mechanics responsible for repairing them, since the women have a quota of output for each day and must work harder to make up for any down time. More interestingly, the supervisors who nominally have more authority also have less power than the mechanics. Since the mechanics know how to repair the machines, and the supervisors do not, the supervisors are unable to exert any real control over the mechanics, see Crozier (1964, pp 98–111).

It is instructive to note the tactics used by the mechanics to preserve their power. The operators were severely scolded for "tinkering" with their machines in an effort to keep them going or repair them. Only the mechanics knew how to repair the machines; each machine was different and just how it needed to be fixed was known only to the mechanics; repairing them was an art not a science. When clashes arose between the mechanics and the supervisors it was over whether the latter could, on occasion, work at repairing the machines. The supervisors were further hampered in this endeavor by the continual "mysterious" disappearance of machine blue prints from the factory. The mechanics always worked without the aid of blue prints.

It is easy to extend Crozier's description of the tactics employed by the mechanics to maintain their control of information and power to other groups of experts. One of the first things any group does to protect its position is to develop a set of terms or jargon that makes much of what it

does inaccessible to outsiders. This can be further buttressed by perfecting techniques of analysis so complicated that outsiders cannot follow them. This done it becomes extremely difficult for those outside the group to take away or evaluate the information possessed by the expert. Examples of this behavior are obvious. Scientists and engineers perhaps come first to mind. In these professions the nonspecialist is clearly at a loss to understand and exercise effective control over the professions. Even within the disciplines the tendency is for information boundaries to arise giving groups power vis-à-vis their colleagues. Thus, the inability of one branch of physics to evaluate the work of another strengthens the position of the inaccessible branch in gathering R&D funds, grants, department positions, or what have you on the basis of its own criteria. The "pecking order" both across and within disciplines tends to be from "hard" to "soft" science on the grounds that the more theoretical or mathematically oriented hard scientists can or could always understand and evaluate the "soft stuff", while the reverse is not necessarily true. The counter argument by the more applied is a rather weak claim of expertise because the theorists are not really familiar with the data or the institutions.

Other professions attempt to create and maintain power in the same way. Consider law. Here is a profession whose language could be, and once was, accessible to the average citizen. Over time, however, the profession has so complicated the language and procedures used in the judicial system that it is nearly impossible for an outsider to participate without hiring a lawyer. The medical profession follows a similar strategy, with the practice of writing prescriptions in Latin being an interesting illustration.

Lacking Latin or mathematics to conceal information and preserve their power, individuals typically resort to the more blatant device of secrecy. Examples ranging from the fraternal "secret handshake" to the classification procedures of the Pentagon and CIA come easily to mind. In each case the purpose is the same, to protect the insider's position by keeping relevant information from the outsider. Although the purported purpose for classifying many documents is to preserve national security by keeping them out of the hands of the nation's enemies, the true, intended "outsiders" often appear to be our own citizens, and the "insiders" whose security is being protected, government bureaucrats.¹

Crozier further buttresses the hypothesis that

uncertainty is the source of power by examining the seemingly anomalous preference for technological change by the director of the Industrial Monopoly and the resistance to this change by the technical engineers. On the basis of social background and status the technical engineers should be more liberal and promote technological change, while the more conservative backgrounds of the directors should lead them to resist it. Decisions to institute changes in technique are made by the directors, however. In the absence of these changes, decisions are sufficiently routine that effective control lies with the engineers. Thus, the only time that the directors can effectively demonstrate their authority is when they initiate changes in plant technique. Uncertainty is then introduced, with the top directors in possession of the relevant information on the new technique. Following the change, uncertainty gradually diminishes, routine returns, and power passes down to the lower levels, until the directors are forced to introduce another change in technique, see Crozier (1964, pp 155-5).

Again, one can easily think of additional illustrations of the importance of information in establishing a group's power. Perhaps, the best one is that of the military. Here one has a situation in which uncertainty, over a weapon's effectiveness, levels of preparation, offensive and defensive strategies, etc is endemic to the activity. This gives the military a strong advantage over other federal bureaucracies in obtaining funds from both Congress and the Executive Branch. The development of an impenetrable jargon, classification of data and so forth, all serve to maintain this uncertainty and strengthen the power of the leadership of the military hierarchy who have or claim to have the relevant information. The otherwise surprising preference of one of the oldest and most conservative bureaucracies, the military, for new and more sophisticated weapons systems, becomes understandable by analogy with the case studied by Crozier.²

These examples hopefully illustrate the role uncertainty and information play in creating and distributing power in bureaucracy. We shall return to an examination of bureaucratic power, after investigating the role information and uncertainty play in generating economic profit.

II. Profit

Consider a world of perfect certainty. All tastes and technologies are known. Labor, land and cap-

ital are combined to produce goods and services. Competition ensures that the prices on all goods and services are driven to the point where they just cover factor input costs. There is no residual left for the entrepreneur (other than a normal compensation for whatever labor services he provided), since there is nothing that requires entrepreneurial skill in a world of perfect certainty.

When uncertainty exists revenues and costs are not always equal. Unexpected changes in tastes, weather, competing technologies and so on produce changes in demand and cost schedules that leave positive or negative "residuals" between total revenues and costs. These revenues accrue to those who assume the responsibility for organizing the company, the entrepreneurs, and are defined as the profits of the firm.³

With uncertainty present, the possibility of "making" profits by correctly anticipating or inducing changes in tastes and technologies arises. The entrepreneur who knows what style of shoes will sell next spring, who knows that a certain technology will reduce costs, and so on, earns profits. Those who do not know these things or makes mistakes earn losses. Entrepreneurial activity thus consists of gathering and evaluating information on what will sell, and what will reduce costs. As long as one entrepreneur has information on what will sell, and others do not (are uncertain) he can earn a profit. Information on consumer tastes and innovations thus provides a firm with the ability to earn more than other firms in the market - with power over the market. This power dissipates as others acquire information about consumer tastes, and imitate the innovations. As uncertainty vanishes so do profits. The "perennial gale of destruction" described by Joseph Schumpeter thus consists of a process of gathering or creating new information which produces surpluses for those who have it, but soon is obtained by all, eliminating profits and setting the stage for a new finding, a new wave of profits and imitation, and so on.⁴

While Knight, Schumpeter and Coase stressed the importance of information not held by "outsiders" to the firm in generating profit residuals, more recently Alchian and Demsetz (1972), and Oliver Williamson (1975) have emphasized the importance of the distribution of information inside the firm to the generation and sharing of the residual. Alchian and Demsetz emphasize the team aspects of production within a firm. These can perhaps be best illustrated by considering pro-

duction a positive sum game of a prisoner's dilemma variety. The cooperative strategy can be interpreted as carrying out some previously agreed set of tasks at a given level of care and effort. The non-cooperative strategy is "shirking" on some of these tasks. All members of the team are better off if all adopt the cooperative strategy than if all do not, but some may still be tempted into shirking if they think they can do so without affecting the choice of strategy by other members of the team. In a small, productive team each member may be able to observe and monitor the behavior of the other members. In a large team this will be inefficient, however. A specialist at monitoring must be chosen. To ensure that this monitor does not, in turn, shirk he must be given the claim to the residual profit of the firm. Thus, in the Alchian-Demsetz theory, profit is also information-uncertainty related. The potential for profit exists in the behavioral uncertainties surrounding the prisoner's dilemma-teamwork production relationship. The profits accrue to the manager-monitors who gather information on other members of the team and ensure that they do not engage in shirking.

III. Power, Profit and the Goals of the Organization

Uncertainty creates the potential for gains and losses, for correct decisions and mistakes. He who has the knowledge or information or intuition to make the correct decisions obtains power. This is true both within and outside of organizations. The individual who chooses the "right" career, buys the "right" piece of property, backs the "right" candidate, plants at the "right" time of year, and so on is ahead of those making the wrong choices. The general principle, then, is that uncertainty creates power for those having the information to make correct decisions in the face of the uncertainty. In the corporation, where the pursuit of profit is an accepted goal, this power is frequently monetarized in the form of high salaries, stock options, insider trading gains by the managers and so on.⁵ In the nonprofit organization or the public bureaucracy power must more often be used to obtain nonpecuniary goals: security, leisure, status and prestige.⁶

The contrast should not be overdrawn, however. Corporate managers are interested in prestige, security and other nonpecuniary goals. And a number of writers have argued that the corporate manager's objectives are a package of pecuniary

and nonpecuniary goals rather than the maximization of profits.⁷ Indeed, since reported profits are by custom and, to some extent, by law the property of the stockholders, managers must exercise their claim in the firm's residual in such a way so that it appears as a legitimate operating cost. Their options for doing so in a way that produces direct pecuniary benefits are limited, so that managers are almost forced to accept part of their share of profits in a nonpecuniary form. On the other side, there are a variety of possibilities by which public officials can gain financially from their position including the use of insider information, the receipt of gifts, bribes, kickbacks, etc.

The analogous role information and uncertainty play in the profit-oriented corporation and the nonprofit bureaucracy suggests that the behavior of individuals in these organizations, managers and bureaucrats, should in many ways be similar.⁸ Both will seek to acquire information-power. Where they will differ, if at all, will be in how they utilize whatever power they possess to achieve their own personal pecuniary and nonpecuniary goals. We can thus expect managers and workers in industrial enterprises to adopt strategems similar to those Crozier describes in the two French bureaucracies of creating self-serving uncertainty, maintaining secrecy regarding information in one's possession, and so on.

The monitoring function managers serve in a teamwork organization suggests another strategy they might employ to increase their power. Recall that the need for monitor-specialists arises essentially because of the free-rider problem created by the prisoner's dilemma nature of teamwork production. The free-rider problem is worse, the larger the team. Thus, the need for monitor-managers and the importance of the information they possess will increase the larger the size of their organization.

Several writers have posited size or growth in size as goals of corporate managers, see Baumol (1967) and Marris (1964). The reasons given are typically the correlation between organizational size and managerial salaries, and the nonpecuniary rewards from managing a large, growing company. Our analysis suggests an additional reason why managers pursue size and growth. Growth can be expected to create uncertainty about the size of the residual profit and, thus, increase the value of the information managers gather. Increasing size worsens the free-rider problem, again increasing the value of the monitor-managers' information. In short, the power of managers within the cor-

poration should increase with size and growth. Managers should favor size and growth as corporate objectives, since they increase their power to achieve any other more direct personal goal the managers have.

The major constraint on management's claims on the profit-residual is the threat of outside takeover, see Marris (1964), Manne (1966) and Alchian and Demsetz (1972). The free-rider problem keeps the average stockholder from carefully monitoring managers, but the voting rights which accompany common shares provide incentives for outside entrepreneurs to buy out large blocks of shares and take over the company transferring the incumbent management's share of profit to itself. To do so, however, the potential takeover-raider needs to have information on the profit he can earn from a successful takeover. This is information that is possessed and for obvious reasons guarded by the incumbent managers. Here again size and, more specifically, diversification can increase the power of managers vis-à-vis potential takeover – raiders by increasing the volume and complexity of the information required to evaluate the potential gains from a takeover raid. Ajit Singh (1971) has presented empirical evidence that the probability of a company's being taken over, given its profitability, does decrease significantly with its size.⁹ Now size should not be an impediment to a takeover in a perfect capital market. But the capital market cannot operate perfectly if there are asymmetries in the distribution of the relevant information, see Stigler (1967). Such asymmetries are precisely what we can expect managers to seek and create to protect their positions, and these would appear to correlate positively with size and growth.

Jensen and Meckling (1976) have developed a model of the managerial firm in which managers do have some discretion to pursue their own goals, but are induced to reveal information about their company's performance to raise capital. The predictions of their model would, thus, seem to be at odds with ours, and also, fortunately, with reality. The Securities and Exchange Commission was founded following the Great Crash of 1929, which revealed that many corporate managers had concealed information from investors, which furthered managerial interests at the expense of bond and stockholders. Since its inception the SEC has fought an on-and-off battle with corporations to induce their managers to reveal more information to which they are privy. The most recent round of this battle has been over the re-

porting by large diversified corporations of sales, profit and similar operating data by corporate division. This is precisely the kind of information one would not expect managers to reveal if they feared a takeover attempt, of course. Indeed, the reason why the company has diversified may be to conceal it. The situation in Europe is, if anything, worse.

The reason why corporations do not have to reveal information of this type to raise capital, as Jensen and Meckling predict, is that most corporations are not heavily dependent on the external capital market for investment funds. This is particularly true of large, mature companies. Thus, reliance on internal fund flows as a source of investment capital is complementary to a management's goals of preserving its power vis-à-vis the other factor owners.¹⁰

Once again, analogous arguments can be extended to regulated firms, nonprofit organizations, and government bureaucracies. William Niskanen (1971) develops his model of bureaucracy on the assumption that bureaucrats are self-interested individuals, who maximize the size of their budget. Niskanen gives little justification for the latter behavioral assumption. The theory presented here helps to explain why this is a plausible goal and in so doing links Niskanen's theory to the traditional literature on bureaucracy extending back to Weber. Increasing the size and complexity of a bureaucracy should increase the insider-bureaucrat's control over information relative to that of its monitors, thus increasing the bureaucrat's power to achieve his personal goals, whatever they might be.

IV. Hierarchy, Power and the Distribution of Profits¹¹

The traditional way of dealing with situations of uncertainty, in which one party may be able to take advantage of another, is for the parties to form a contract specifying the rights and obligations of each under the various contingencies that may arise as time unfolds and the uncertainties disappear. Should conflicts arise at some point, the parties to the contract can then appeal to an impartial third party to arbitrate their claims as established and guaranteed under the contract. Given the uncertainties and potential for conflict over the distribution of residual share that exist in the firm, one would naturally expect the members of this team to resort to the use of contract to protect their claims to the residual share. The major factor

owners of the firm are, of course, joined in a form of contractual relationship. Let us see therefore how information and uncertainty are handled under these contracts.

The contract between the common shareholders and the corporation is decidedly open-ended. Although the profits of the company figuratively belong to the stockholders, the determination of what gets reported as profits is made by the management, and the determination of what fraction of those profits that are reported gets paid as dividends is made by the board of directors. In principle, this latter body is supposed to serve as an impartial third party between management and stockholders to ensure that management does not abuse its insider's position at the expense of the stockholders. In practice it is typically under management control with management occupying several positions on the board, and undoubtedly wielding more power than its numbers suggest due to the greater amount of information its representatives possess about company operations. Indeed, since the board is heavily dependent on the management for information it must be largely under management's control. This fact is revealed in the following quote from the Board of Directors of the Pennsylvania Railroad made more than 100 years ago, and some 50 years before Berle and Means (1932). "The present form of organization (part-time directors and full-time officers) makes practical ciphers of the Directors, and this is from no deliberate intention, but from the very necessities of the case." After presenting this quote, Alfred Chandler (1962, p 313) went on to observe that, "Once a large business had reached a size that required the services of several full-time administrators, the board and the stockholders had only a negative or *veto* power on the government of their enterprise and on the allocation of its resources. They could say no, but they had neither the information nor the awareness of the company's situation to propose realistic alternative courses of action."

Thus, the stockholder's contract with corporate management does not offer much protection against the management's power to claim a larger fraction of profits than was understood at the time both became parties to the contract. The stockholder's major means of controlling management remains his right to sell his shares, or refuse to buy. We are thus back to the threat of takeover, and the discipline of the capital market. It should be stressed that either of these would suffice if the management could not withhold information

from the market. Solow (1971) has shown that the capital market can discipline a growth-maximizing management to maximize stockholder welfare by withholding capital from the company at the time of its inception. To do this, however, the market must know at the time the company is born what its growth and investment pattern will be throughout its entire life. Armed with this amount of information, the capital market has full control (power) over management. But obviously the uncertainties which surround a company's future at its birth allow no such discipline. As time passes, and the future becomes the present, information on how the various uncertainties facing the company are being resolved accrues asymmetrically to management and the stockholders. This unbalanced accumulation of information shifts the balance of power in favor of management and allows it to interpret the terms of the stockholder-management contract in a way which is most favorable to the latter.

As John Commons (1924, p 285) once observed, the wage contract typically "is not a contract, it is a continuing implied *renewal* of contracts at every minute and hour based on the continuance of . . . satisfactory service . . . and compensation". The chief, and often only, explicit stipulation of the contract is that the employee agrees to accept authority within some limits for a certain wage. See Simon (1957). Thus, the labor contract is open-ended with respect to both time and duties. Given that labor and management participate in a teamwork activity, the fruits of their participation will appear as a joint product the division of which is in part arbitrary. The potential thus exists for conflict between worker and management over how the jointly produced residual is divided (wages), and how the vague limits to managerial authority are determined in practice.

The nature and complexity of the employment relationship requires that the bulk of the terms of this contract remain vague and implicit. Indeed, as Williamson (1975) has emphasized, implicit contracts are the distinguishing feature of hierarchical organizations. But with the bulk of the terms of the contract implicit, they cannot be arbitrated by impartial third parties. Instead, one of the parties to the contract must itself arbitrate the contract, and this task naturally falls to management given its role of information gatherer and monitor. But, this also gives management great latitude to interpret (arbitrate) the contract in ways most advantageous to itself.

The worker's ability to ensure his share of the

company's joint product comes not from his ability to enforce the terms of contract on an ongoing basis, but, in much the same way as with stockholders, in his right to quit or not join the company. Economists often assume this right suffices. Alchian and Demsetz (1972), for example, compare the worker-manager relationship to the customer-grocer relationship. But labor is seldom as mobile as this analogy suggests. Softness in the labor market, the accumulation of industry or firm specific skills, or merely the inertia resident in a given community builds up over time, produces rents that can be appropriated by management. The only way for labor to protect itself from this form of exploitation is to demand more explicit contracts amenable to third party arbitration.

It is interesting to note in this regard that employment contracts in the public sector have typically been much more specific and protective of employee rights than they have been in the private sector. Why this should be so is not clear. Public sector employees would not appear to be inherently less mobile, as a group, than private sector employees, although in some areas the government is in a monopsonist position, and conceivably could exploit employees with "firm" specific human capital. Whatever the explanation, it is interesting to observe the extension of civil service-type rules from the public to the private sector, a trend more pronounced in Europe than America but nevertheless observable there also. The growth of labor unions and the strengthening of the labor contract is also in part a method for increasing the worker's capacity to monitor managers, in part a formalization of the worker-management contract to allow third party arbitration. Finally, experiments in worker participation are efforts to involve workers directly in information gathering and the mutual monitoring of managers. Not surprisingly these have met with the greatest resistance from management.

V. Conclusions

Since the end of World War II both governments and business have grown tremendously in size. What is more, in most countries this appears to be a continuation of a secular process rather than the outgrowth of a cycle. In the United States at least, the growth of the former has recently been treated with some alarm. Social scientists from a variety of disciplines and ideological persuasions have begun to explore models of budget-maximizing bureaucrats and vote-maximiz-

ing legislators. Somewhat surprisingly, the growth in business size has not met with a similar reaction. Economists, in particular, to the extent that they notice it at all, appear to treat it as the natural consequence of the Darwinian forces of the market seeking out more efficient organizational forms.

The arguments of this paper suggest that the two phenomena may be more closely related than generally believed. The differences between profit and nonprofit institutions may be far less than seems to be implied by the economics literature, at least. All organizations must deal with uncertainty, all must gather and process information to do so. In the process, certain individuals within the organizations will be vested with the power to advance their own goals to the disadvantage of other members of the organization, and can be expected to exercise that power. These characteristics all organizations have in common, and they can be expected to produce important similarities in their performances. Rather than continually stressing the difference between profit-oriented and nonprofit-oriented bureaucracies, we might begin now to explore some of their similarities.

Footnotes

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- 1 The importance of secrecy to creating and preserving political power has been emphasized by Francis E Rourke (1961, 1969). See also Mills (1956) and Weber (1947).
- 2 See Amacher, Tollison and Willett (1976) and Rourke (1969, pp 55-58). The military is one of the three major groups making up Mills' (1956) power elite. Mills also lays great emphasis on the importance of secrecy in maintaining power.
- 3. The most extensive development of the uncertainty-based theory of profit is by Knight (1921).
- 4. Schumpeter did not speak of information but of innovations. They amount to the same thing, however. For an innovation is nothing more than an idea that a new product (invention), or process, or organizational structure will produce a profit. And it is successful only to the extent that the idea (information) is a good one. Schumpeter's theory is best developed in *A Theory of Economic Development* (1934). Other important theories of the firm and of profit can also be related to information of a specific kind. Thus, Ronald Coase stresses information about what kinds of activities are more efficiently handled within the firm than in the market (1937). For further discussion see Mueller (1976).

5. On the link between managerial salaries and profits, see Lewellen and Hutsman (1970) and Masson (1971). On insider trading see Manne (1966).
6. See, e.g. Downs (1967).
7. See, e.g. Baumol (1967), Marris (1964), Williamson (1964) and Galbraith (1967).
8. Several writers have sought an analogue for power in the economic sphere. Peter Blau (1964) compares the Knightian entrepreneur's receipt of profit to the political leader's receipt of power as reward for making risky decisions, but does not develop the analogy. Talcott Parsons (1963) compares power to money. Kuehn (1975) and Smiley (1976) present additional evidence regarding the slack in the takeover mechanism. Smiley's results are particularly interesting. He found that a successfully takenover firm had fallen to 50 percent of its potential value by the time of its takeover, but that only 30 percent of this loss appeared to be recoverable following the takeover. Thus, as one might expect, the managers exercised their claim on the company's profits in such a way as to limit the gains from successful takeover to a fraction of their potential magnitude.
10. For further discussion of the relation between the managerial theory of the firm and internal investment theories see Grabowski and Mueller (1972). On the importance of firm maturity to the stockholder/manager conflict see Mueller (1972) and Grabowski and Mueller (1975).
11. This section draws in part on FitzRoy and Mueller (1979).

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