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THEORETIC APPROACH

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The growing separation of ownership from control has been well-documented by Berle and Means (1932) and Larner (1966). This paper formalizes into a mathematical equation the relevant variables which have been put forward by various authors as being important in determining whether the separation of ownership from control should affect a firm's profit performance. In section I a decision-making model is developed, incorporating what has become known as the managerial enterprise. In section II, this model is used to ferret out the key issues in the various theoretical arguments concerning the managerial enterprise.

I

Consider first a small, owner controlled and managed firm. Even in such a simplified case as this, the maximization of the firm's profits may be neither a necessary nor a sufficient condition for the maximization of the owner's utility. The reason for this lack of equivalency between the two maximizations is that taxes will influence the owner's decisions at the margin. Suppose, for example, that the owner is considering taking a vacation. If he does so, he must not only pay for the vacation but also pay the income taxes on somewhat more than the income used for that vacation. If, however, he can meet some actual or prospective business associates or customers during that vacation, he can consider part or all of the expenses of the trip (depending on how honest he is) as business expenses. This latter alternative would understate the profits of his

-1-
firm, but the total value of goods and services which he could purchase would increase because, while he must still pay for the vacation, he no longer would have to pay taxes on that portion of income which would otherwise have been used to finance the vacation.

In equation form, the decision criterion would be

\[ U_{\pi_1} \gtrless U_{\pi_d} \]

where \( U_{\pi_1} \) is the utility the owner would expect to receive by choosing the alternative which would increase his firm's profits and \( U_{\pi_d} \) is the utility he would expect to receive by choosing the alternative which would decrease his firm's profits.\(^1\)

The terms of equation (1) can be broken down in the following manner:

\[ U(Y_i) + U(N_i) \gtrless U(Y_d) + U(N_d) - U(C) \]

where \( U(Y_i) \) is the utility he would receive from his income (net of taxes) received by selecting the profit-increasing alternative, \( U(N_i) \) is the utility generated from non-pecuniary sources by this alternative, such as a feeling of pride that he was earning the highest possible profits in his firm; \( u(Y_d) \) is the utility he would receive from his net income under the alternative which would reduce the firm's profits, \( U(N_d) \) is the utility he would derive from non-pecuniary sources by decreasing the firm's profits (in the above example, this utility would come from the vacation), and \(-U(C)\) is the expected loss in utility, both pecuniary and non-pecuniary, the owner would have to suffer if the profit-reducing alternative involved illegal or semi-legal activities at which he might get caught.\(^2\)

Equation (2) can be broken down still further:

\[ U(Y_d + \Delta Y(1-t)) + U(N_i) \gtrless U(Y_d) + U(N_d) - P_c(U(Y_c) + U(N_c)) \]

This equation is based on the fact that the income received from the alternative
which increases profits has a lower limit equal to the income received from the alternative which decreases profits. Added to this income is the difference in profits between the two alternatives, times one minus the tax rate at which these additional profits would be taxed. The equation also makes explicit the estimated probability of the owner's getting caught at some illegal activity, $P_c$, and the potential loss of utility from a loss of income due to such things as fines, $Y_c$, and from a loss of non-income, utility-producing items, $N_c$, such as the prestige lost by being branded a criminal.

If the left side of equation (3) is greater than the right side, the decision maker will choose the alternative which increases the firm's profits; if the right side is greater, he will choose the other alternative; and if the two sides are equal, he will be indifferent between the two alternatives. In the example of the vacation-business trip, if $U(N_i)$ and $P_c$ are approximately zero, the owner will probably choose the profit-reducing alternative because $U(N_d)$, the utility of the "business trip," would be greater than $U(\Delta \tau (1-t))$, since $\Delta \tau (1-t)$ income would not be able to purchase a vacation of as high quality or quantity as he could otherwise have. In cases in which the owner must suffer some disutility from the profit-reducing alternative, e.g., having to spend some time with unpleasant business and associates during what otherwise would be a pleasant vacation, $U(N_d)$ is lower than in the former case, and the direction of the inequality is less clear-cut.

When a corporation is considered in which a manager is not a significant stockholder, equation (3) must be expanded to allow for additional incentives affecting him. Here, $\Delta \tau$ must be reduced not only by the corporation profit taxes which must be paid on $\Delta \tau$, but also by the amount of $\Delta \tau$ which will
not accrue to the manager and by the personal income taxes to be paid on 
that portion of Δ\pi which does accrue to him. Let \( t_{\pi} \) be the corporation 
profits tax rate, let \( d \) be the percentage of Δ\pi which the manager expects 
will not accrue to him, \(^3\) and let \( tp \) be the personal income tax rate applic-
icable to the manager. Clearly \( d \) is in probability terms. Equation (3) 
as it relates to a manager's choice now becomes

\[
U(Y_{d\pi} + \Delta\pi (1-t_{\pi})(1-d)(1-tp)) + U(N_{i}) \lesssim U(Y_{d\pi}) + U(N_{d}) - P_{cg} (U(Y_{cg}) + U(N_{cg}))
\]

\[
- P_{cgn} (U(Y_{cgn}) + U(N_{cgn})) - P_{cgo} x P_{cgo} (U(Y_{cgo}) + U(N_{cgo}))
\]

\[
- P_{co} (U(Y_{co}) + U(N_{co})).
\]

The term involving the probability and disutility of being caught has 
been revised to allow for the different probabilities and punishments of being 
caught by the government or the owners. \( P_{cg} \) is the probability that the 
manager will be caught and punished directly by the government if the profit-
reducing alternative includes illegal activities. \( U(Y_{cg}) \) and \( U(N_{cg}) \) repre-
sent the amount of utility lost from being caught and punished by the govern-
ment, and they include whatever actions may be taken by the owners to further 
punish the manager, even though the owners themselves may not be punished 
for his indiscretion.

\( P_{cgn} \) is the probability that the manager's action will be detected by 
the government but that only the corporation, not the manager, will be punished 
by the government. Even if the owners do not detect and/or punish him in 
turn for his action, he may suffer some loss resulting from the overall loss 
of profits and stature suffered by the corporation if his action is deemed 
illegal by the government.

In addition, the manager must consider the possibility that if \( P_{cgn} \) is
positive, the owners will try to determine who within the organization performed the illegal act and will try to punish him themselves. $P_{cgn} \times P_{cgo}$ represents this probability, and $U(Y_{cgo}) + U(N_{cgo})$ are the losses the manager expects if such an event were to occur.

Finally, $P_{co}$ is the probability that even in the absence of government action the owners will detect and punish the manager for selecting the profit-reducing alternative.

Some of the other terms in equation (4) take on an extended meaning when the ownership and management roles are not performed by the same person. $\Delta \pi(1-t_{c})(1-d)$ includes possible bonuses and increased pay based on outstanding performances. It also includes the portion of the increased profits which the manager expects to receive if he owns a small amount of stock in the corporation. $U(N_{i})$ includes the utility gained by a profit-increasing manager from obtaining a promotion and from increasing his good will with the owners, in addition to the possible good feeling of a job well done. $N_{d}$ can take on many forms. It may include such things as prettier-than-average secretaries, thicker-than-average carpets, bigger-than-average desks, or generally plush surroundings. It may also include such other perquisites as club memberships, first-class travel, or the provision of a company car for personal use.

The $Y_{c}$ terms cover not only the lost income due to fines imposed on illegal activities, but also the potential cut in pay because of a possible demotion or because a new job must be found. The $N_{c}$ terms include, in addition to the possible stigma of being branded a criminal, the possible loss of status in the firm because of a demotion or because of falling out of favor with the owners. In his deliberations as to which alternative to select, the manager must estimate probability distributions for $d, N_{i},$ and all of the $Y_{c}$
and \( N_c \) terms since these terms are not known to him with certainty. And these probability distributions may change from situation to situation.

Consider now a manager faced with the decision of whether to pay for his vacation out of his net income or to call it a business trip and to let his company pay for it. In this example \( \Delta \tau \) is the cost of the business trip; this amount would be added to the firm's profits if the manager were to pay for the vacation himself. He might expect \( d \) to be somewhat close to one if he believes there is little reason for the owners to bestow gifts on him for doing what they think he ought to do anyway. If he expects \( d \) to be near one, he might also expect \( N_d \) to be near zero for similar reasons. Consequently, in this case, the left side of equation (4) may differ very little from the first term on the right side of the equation.

The decision, then, reduces approximately to a consideration of whether all but the first term of the right side of (4) sum to more than, less than, or just zero. \( U(N_d) \) would be comprised of the utility gained from the vacation plus the utility gained from "putting one over" on the owners, minus the disutility created by the scorn the manager receives from associates who know about and disapprove of his actions, minus the disutility generated by just his fear of being caught, and minus the disutility resulting from any actions he may feel are necessary to minimize his chances of being caught.

The probabilities of the manager's being caught and punished and the probability distributions of the \( Y_c \) and \( N_c \) terms will depend on a number of things. A list of their determinants should probably include the scrutiny with which the Internal Revenue Service studies the tax returns of large corporations and the extent to which various managerial perquisites are tolerated by the owners.
II

Besides providing a formalization of the incentives involved in some of the decisions made by managers, equation (4) serves as a basis for discussions of theories suggested by previous writers as to why the separation of ownership from control might or might not affect a firm's profitability. For example, Adam Smith noted that the grant of a perpetual monopoly merely enables, "...the company to support the negligence, profusions, and malversation of their own servants, whose disorderly conduct seldom allows the company to exceed the ordinary rate of profits in trades which are altogether free" (1937, p. 712). In such a situation Smith believed that the expected loss of utility from not maximizing profits was near zero because regardless of the probability of being caught, no punishment of any significance could be imposed from outside the firm. By eliminating competitors, the grant of a perpetual monopoly would eradicate potential punishment which might otherwise result through the interplay of market forces; and by implicitly including the stockholders among the group of malversants, Smith eliminated another potential source of punishment. Under such assumptions, the conditions are quite conducive to non-profit-maximizing behavior.

The fact that Smith chose a monopoly situation for his example is not unimportant. It suggests that owners are willing to tolerate what might be called internal inefficiencies on the part of managers up to the point at which a firm's profit rate is reduced to the perfectly competitive rate of return but not beyond that point. In the absence of profit-reducing activities by the owners, the $Y^c_0$ and $N^c_0$ terms of equation (4) are near zero so long as the firm's profits are at least as great as the "normal rate of return," but these terms are significantly positive once the firm's profits become
subnormal. Of course these terms may also be near zero while the firm's profits are subnormal if owners participate in profit-decreasing activities too.

Other writers have also pointed out the possibility of non-profit-maximizing behavior in corporations which have a separation of ownership from control. Papandreou states that, "Rationality is consistent with the maximization of other things as well as profits" (1952, p. 206). He further points out that stockholders rarely are able to control completely a large corporation (pp. 197-198). An implicit conclusion to be drawn from these two points is that managers maximize their utilities subject to a constraint exercised by the stockholders. In terms of equation (4), Papandreou's first statement suggests that in general $U(Y_d) + U(N_d)$ is greater than the left side of the equation. His second statement indicates that he believes the various $P_o$ terms on the right side of the equation to be substantially less than one and to provide only a slight constraint for non-profit-maximizing behavior by managers.

Gordon (1961) also views the $P_o$ terms as constraints on the profit-decreasing behavior of managers:

"The development of the large corporation has obviously affected the goals of business decision-making... Almost certainly the personal and group goals of higher and lower executives are a part of the total value system--the desires for security, power, prestige, advancement within the organization, and so on. One result, almost certainly, is that the maintenance of satisfactory profits is a more accurate statement of the profits objective than is complete profits-maximization. Perhaps it is not inaccurate to say that profits are viewed as the basic constraint subject to which other goals can be followed. Subject to this constraint, some profits will be sacrificed in pursuit of other goals" (p. xii).

That firms might satisfice, seek only a satisfactory profit rate, rather than maximize has been argued strongly by Simon (1957, 1959, 1962).
Among the reasons that one might observe satisficing behavior by firms, Simon includes, "It is often observed that under modern conditions the equity owners and the active managers of an enterprise are separate and distinct groups of people, so that the latter may not be motivated to maximize profits" (1959, p. 262).

Berle, too, suggests that managers must only satisfice in order to keep stockholders from organizing to attempt a change in management.

"Save in the diminishing number of enterprises whose founding adventurer or his family still holds an aggregate block of stock sufficient to dislodge a management if they are displeased, stockholders physically cannot, and by law are not permitted, to enter the decision-making process. ...It is maintained, with truth, that the opinions of stockholders do have influence; that stockholders at meetings can raise 'pertinent and sometimes embarrassing questions, sometimes with devastating effect' [quoted from Peterson (1965, p. 22)] and that they constitute a substantial special public, some of whom at least scrutinize the management. Yet sporadic and only occasionally effective use of this scrutiny does not add up to 'control' or anything approaching it. At best, the scrutiny is a variety of post-audit. This is an instance of an old word ('control'), apt in the days of plutocratic 1890's, used by neoclassicists in quite different sense as applied to the discontinuous, occasional, quasi-political corporate processes of corporate government today. Practically its entire content now is that stockholders like to see dividends and market values rise, and disliking the contrary, complain, seek to find the causes, on extremely rare occasions organize changes, when there is trouble.

"...One need not jump to the conclusion that the administrators of corporations are therefore 'irresponsible.' But again their responsibility differs in content. They are responsible to the impersonal institutional collective known as 'the company;' they are secondarily responsible to the direct desire of stockholders at any given moment to enhance their immediately tangible take or to have losses explained. Stockholders act like an unorganized, usually inert, political constituency. They are a 'field of responsibility'--far, indeed, from an entrepreneurial controlling force" (Berle, 1965, pp. 30-31).

In the language of equation (4), Berle is saying that so long as a firm reports profits which are by some criterion satisfactory, the $P_0$ terms of
equation (4) are near zero. Only when a firm's profit performance becomes unsatisfactory do the $P_0$ terms take on values significantly greater than zero, and even then they have values substantially less than one.

Kaysen supports this view and extends it to say that rational managers would, for reasons other than fear of stockholder revolts, find it to their advantage to avoid situations in which profits become unsatisfactory:

"It is clear that in a large corporation, even the knowledgeable stockholder, with substantial holdings, who himself sits as director though not an officer, must in general accept the analysis of the issues and the choice of alternatives which the officers make. To be sure, his presence, and the anticipation of it in turn shapes the way the officers themselves look at the issues. But, unless stockholders are in the position of selecting the officers in practice--e.g., the DuPont situation in General Motors, before the divestiture--it is the perspective and judgments of the officers which are central. Issues are complex, decisions can be seen only in terms of alternatives which themselves are posed by the processes of staff work under the control of the officers, alternatives which fall outside the perspective of management judgment can rarely be brought into focus by an occasional outside question. And, of course, the case we are positing is no longer the typical one; the director representative of large stockholders is declining in importance, as compared with the inside board. So the representative stockholder, certainly in terms of numbers, and probably in terms of shares, is not really able to do more by his direct influence on the representative large corporation than constrain management from obviously foolish or unprofitable actions. Management, in general needs no such outside constraint; on any theory of its own interests, the constraint will be provided internally" (Kaysen, 1965, pp. 46-47).

Probably the best statement about the values of the $P_0$ terms has been made by Monsen and Downs (1965). They point out that the $P_0$ terms are small if the firm is doing well, but are large if its performance is unsatisfactory:

"...although a very poor management performance may result in a rebellion, a very good one does not usually cause a powerful movement among stockholders to reward their managers with lavish bonuses. Hence the punishment for grievous error is greater than the reward for outstanding success. This asymmetry between failure and success tends to make the managers of a diffused-ownership firm behave differently from the managers of the type of owner-managed firm envisioned by traditional theory" (p. 226).

Monsen and Downs also suggest other possible manifestations of the asymmetric economic forces affecting managers. Several of these are
"Top managers will use their roles in the firm to enhance their own personal prestige and stature. As a result, they will contribute to local causes and participate in community affairs more than they should from a purely profit-maximizing point of view.

"...Expense accounts are likely to be more extravagant in managerial firms than they would be if managers really maximized returns to owners. Although expense-account benefits and salaries are both deductible, salaries are a much more visible and easily checked form of management compensation. Therefore, managers will seek to expand expense-account benefits in order to raise their total compensation without attracting the attention of owners. This will result in greater total compensation for them than is required to retain their services. The fact that such non-salary benefits will influence their choices among firms (and hence may appear to be a necessary part of their compensation by each firm) does not destroy this argument. Managers as a group are probably extracting rent because of inflated expense accounts; that is, they are compensated more in all managerial firms than is necessary to keep them from becoming non-managers. Thus what may appear as true costs to individual firms are still an excessive reduction of profits among all managerial firms compared with what profits would be if truly maximized.

"...Managerial firms are likely to respond more slowly to declines in profits than they would if they really pursued profit maximization. Since managers wish to preserve their personal prerogatives (such as large expense accounts) and do not suffer directly from lower profits, they will be willing to 'ride out' a sudden decline in profits without cutting back expenditures in the hope that it will be temporary. In contrast, true profit-maximizers would exhibit no such inertia but would immediately alter their existing behavior patterns. However, if lower profits continue, even managerial firms will adjust their behavior so as to avoid having lower yearly earnings cause any decline in stock prices (if possible)" (pp. 233-234).

The leading contemporary proponent of what have come to be called theories of managerialism--theories implying different performances by differently controlled firms--is Oliver E. Williamson (1963).

"...in the absence of vigorous competition in the product market and where the separation of ownership from control is substantial, there is no compelling reason to assume that the firm is operated so as to maximize profit. ...where discretion in the decision-making unit exists, this will ordinarily be exercised in a fashion that reflects the individual interests of the decision-makers" (p. 55).

Williamson lists four basic motives or economic incentives which influence managers:
2. Security
3. Dominance:
   a) status;
   b) power
   c) prestige.
4. Professional excellence" (p. 32).

These motives are related to economic activity by what Williamson terms "expense preference".

"By expense preference I mean that managers do not have a neutral attitude toward all classes of expenses. Instead, some types of expenses have positive values attached to them: they are incurred not merely for their contributions to productivity (if any) but, in addition, for the manner in which they enhance the individual and collective objectives of managers" (p. 33).

Expense preference is revealed by managerial behavior in three realms: staff, emoluments, and discretionary profit. Williamson assumes,

"...that the management has a positive expense preference for staff...[because]...being a means to promotion, expansion of staff serves to advance both salary and dominance objectives simultaneously. In addition, staff can contribute to the satisfaction of security and professional achievement objectives as well. ...As long as the organization is able to satisfy its acceptable level performance requirements, the tendency to value staff apart from reasons associated with its productivity produces a predisposition to extend programs beyond the point where marginal costs equal marginal benefits" (pp. 34-35).

Emoluments "...are economic rents and have associated with them zero productivities. They are not a return to entrepreneurial capacity but instead result from the strategic advantage that the management possesses in the distribution of returns to monopoly power" (p. 35). Emoluments can be in the form of salaries and/or perquisites, but probably at least part of them will be in the form of perquisites because of the tax incentives discussed earlier in this chapter and because, "...perquisites are much less visible rewards to the management than salary and hence are less likely to provoke stockholder or labor dissatisfaction" (p.35). Williamson does not mention another reason why managers would prefer to take some of their
emoluments as perquisites. This reason is that managers may not have much of a choice in the matter. If they give up some perquisites, their salaries may not increase significantly, and if they seek additional perquisites, their salaries may not fall significantly.

Discretionary profits, that portion of a firm's profits which exceeds the minimum profit constraint imposed explicitly or implicitly by stockholders, are sought by managers because they help finance growth which in turn increases the likelihood of acquiring additional staff and emoluments. Discretionary profits are also sought because they provide the managers with a feeling of self-fulfillment and professional success (p. 36). Another reason, not mentioned by Williamson, that managers might seek discretionary profits is that their salaries are in most cases a positive, monotonic function of the firm's profits.

These three basic types of expense preference are formalized by Williamson into an objective function for the firm as an entity:

"maximize: \[ U = U(S, M, \pi_r - \pi_o - T) \]

subject to: \[ \pi_r \geq \pi_o + T \]

(p. 52),

where

\( U \) is the firm's utility function, \( S \) is staff, \( M \) is managerial emoluments, \( \pi_r \) is reported profit, \( \pi_o \) is the minimum profit constraint (after taxes) imposed by stockholders, and \( T \) is taxes. \( \pi_r - \pi_o - T \) represents discretionary profit.

This model has two serious drawbacks. First, not only is it non-operational in the sense that it cannot be directly tested (a problem also with equation (4)), but it even lacks explanatory power for individual decision making. At least the model developed in the present study highlights the important variables to be considered by each manager, but Williamson's model
is developed for the firm as a whole. And this point leads to the second serious drawback of Williamson's model.

The model assumes that a utility function exists for the firm, but there is no reason to assume that such a function has the properties of transitivity and convexity usually attributed to an individual's utility function. The firm is made up of a number of people, each with their own preference systems, and each trying to influence the firm's actions. Something akin to a social welfare function might be attributable to a firm, but since such a function is a composite of individual preferences, it may permit non-transitive or seemingly inconsistent preferences to coexist and even be realized.

Arrow (1951) has shown that under a one-man, one-vote social choice mechanism, preferences may be intransitive for a group faced with more than two alternatives. While a firm probably does not employ such a social choice mechanism, so long as several of its employees can affect its actions, the potential exists for intransitive composite preferences. For example, suppose A has ten votes, B has seven votes, and C has four votes, and the three of them must choose between alternatives X, Y, and Z. Suppose further that they would rank the alternatives as follows:

<table>
<thead>
<tr>
<th></th>
<th>X</th>
<th>Y</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>B</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

In an election between X and Y, X would receive 14 votes and Y would receive 7 votes; X would be preferred to Y. An election between Y and Z would yield 17 votes for Y and 4 votes for Z; Y would be preferred to Z. A contest between X and Z would result in 10 votes for X and 11 votes for Z;
Z would be preferred to X. X is preferred to Y, Y is preferred to Z, but Z is preferred to X. A classic intransitivity exists even though the voters' preferences are not weighted equally.

In a corporation, the weighting scheme of the social choice mechanism may not be formalized in the above manner, but so long as decisions are made collectively, this potential for intransitivity exists. Consequently, a collective utility function for the firm should be used with caution because it is not the same type of function usually discussed in theories of consumer behavior.

In a series of articles by Leibenstein (1966, 1969) and Comanor and Leibenstein (1969), another type of profit-reducing behavior is discussed which is of relevance to the theories of managerialism. The concept of X-efficiency is developed, depending on three things: "(1) Intra-plant motivational efficiency, (2) external motivational efficiency, and (3) non-market input efficiency" (Leibenstein, 1966, pp. 406-407). Though the connection is not developed in detail by them, item (2) of X-efficiency, external motivational efficiency is of particular relevance. It encompasses (or can be extended to do so) both the pressure put on managers by stockholders to increase profits and the pressure felt by managers by stockholders because of potential competition in the product market. For firms in which ownership is separated from control and for imperfectly competitive firms, the probabilities of profit-reducing activities being punished may be lower than they otherwise would be, and hence external motivational efficiency may be low.

Several of the conclusions drawn from X-efficiency studies are

"(1) Output of the firm is not produced on what conventionally would be viewed as the production possibility boundary but well short of it.

(2) The distance between actual output and the production possibility boundary depends on the incentive-reward system within the firm.
(3) Costs per unit of output are not minimized. Leibenstein, 1969, p. 622).

One of the primary ways in which X-inefficiency is exhibited is through an inertia with respect to technological change. Managers may have full knowledge of more profitable technologies but fail to implement them because the status quo is satisfactory to everyone concerned. This is a different type of satisficing, but is closely related to Simon's discussion of the term. In both cases less-than-maximum profits are being earned because those involved find the status quo satisfactory.

The literature reviewed to this point suggests a number of different reasons why the right side of equation 4 might be greater than the left side. The authors included in this review all provide reasons why the separation of ownership from control might affect a firm's profit performance. Not all economists agree, however. Many argue that more often than not the potential gains to a manager for profit-reducing behavior are minimal and that the probabilities of his being caught and punished in some fashion for such behavior are high. For example, Peterson, in arguing that \( U(N_d) \) is probably low, says that

"...objectives of prestige, power, and sense of accomplishment, as well as income, depend heavily for their realization on the firm's success, as determined by its profits. This attitude seems the more likely when managers live, move, and achieve their reputations in a business culture, or subculture, which resides in the mores and institutions which surround corporate operations. This is a culture of income statements and balance sheets, of stress on per-share earnings and earnings growth, of securities analysts scrutinizing company performance, of vast institutional investing which rests on expert appraisal of corporate quality and promise, of ratings by articulate management consultants. It is a culture, also, whose high-quality press reiterates the marks of corporate excellence and names names as it recounts the record of success and failure. And now it is a culture that the computer enters to sharpen guidelines to higher revenues and lower costs" (1965, pp. 12-13).

If, as Peterson claims, \( U(N_d) \) is low, then the left side of equation (4)
in most cases may be greater than the right side, and there may be no observable difference in profit performance between owner controlled firms and manager controlled firms. In terms of Williamson's model, Peterson is saying that discretionary profits are very important in managers' utility functions because increased staff and emoluments depend on increased profits. Peterson would go so far as to claim that the independent effect generated by a desire for staff and emoluments is insignificant relative to the effect of the desire for increased profits.

Peterson further argues that even if \( U(N_d) \) is not insignificant, when a corporation is viewed as a small part of a large economy, it becomes clear that there is very little latitude for discretionary behavior by managers.

"The economics of managerialism appears weakest as it enters the area of system-wide control. ...Since the control problem is not grasped, the point is missed that the revenue-cost decisions by which the firm survives and prospers are likewise the means by which, in its small province, it responds to the entire range of alternatives on the other side of the markets in which it sells and buys, thus playing its part in causing the control to operate" (p. 13).

In other words, Peterson believes that because of strong economic forces impinging on the firm and its managers from all directions, \( V_d \) may be sufficiently low that even a sizeable potential \( N_d \) would not be enough to persuade managers not to maximize profits.

The size of the \( P_o \) terms is also believed by Peterson to play a significant role in a manager's decisions:

"Final assertion by stockholders of their legal position is through the proxy contest or the derivative suit. Both are belittled by critics as too infrequent to be meaningful; but this view misconceives their influence. Far from being an ordinary election, a proxy battle is a catastrophic event whose mere possibility is a threat, and one not remote when affairs are in conspicuous disarray. There is similar threat in stockholder suits that may be provoked by evidence of serious self-dealing. On the principle that legal prohibitions are to be judged not by guilt discovered but by guilt discouraged, these suits may, as has been said, have accomplished much in policing the corporation system" (p. 21).
The point here is that the $P_0$ terms are not based on the fact that few proxy fights or derivative suits have emerged in the past. Rather, the emphasis is on the fact that the existence of only a few precedents may be sufficient to cause a manager's subjective evaluation of the $P_0$ terms to be fairly high. Such a possibility implies that managers might frequently choose to maximize profits instead of running what they believe to be a high risk of being caught and punished.

One of the reasons that managers may have little latitude for discretionary behavior is that the stock market provides an indirect control of their behavior. If managers suspect that they might ever want to increase the capital of the firm to finance additional growth through a new stock issue, they will want to receive a high price for the new issue. They can usually receive a high price if they report high profits. Along this line, Peterson says,

"Most likely to be overlooked by non-economists are the inherent limitations on self-dealing. It must not threaten the firm's success, through which executive ambition must largely realize its aims. It must not seriously affront the stockholder as source of capital, for, though most capital is raised otherwise, the equity investor is not so unlikely a source as to warrant high-handed treatment of him. And however capital is raised, self-dealing should not so dampen public demand for outstanding stock as to make capital commitment seem unjustified" (p. 21).

Baldwin (1964, p. 251) support this view with the claim that institutional investors such as insurance companies, trust companies, and mutual funds have a full complement of researchers studying the relative profitability of different corporations and recommending various portfolio adjustments in response to changes in relative profitabilities. These highly sophisticated investors, through their actions in the stock market, will affect the price of a firm's stock and because of this affect, impose capital constraints on the discretionary behavior of managers.
This argument is extended by Hindley (1969) to include the market for corporate control. If managers do not maximize a firm's profits, others outside the firm will eventually become aware of this situation and through proxy fights, tender offers, or outright purchase will obtain control of the firm at a price which will be handsomely rewarded after the take-over is completed and the firm is made more efficient. Even the threat of such a take-over (and the subsequent removal of the incumbent managers) will serve to limit managerial malfeasance. A manager considering a profit-reducing activity must allow for the probability that he will be caught and punished not only by the present owners but also by potential owners. This recognition of the importance of potential owners, Hindley would argue, significantly increases the $P_o$ terms of equation (4), and, consequently, will lead managers to decide that profit-maximizing activities are more likely to be in their own best interests.

An important point to be gleaned from the arguments by Peterson, Baldwin, and Hindley is that not all economic actors imposing constraints on a firm's management must be diligent, sophisticated, and well-informed. A small proportion of them at the margin will in most cases be sufficient either to directly narrow the range for managerial discretion or to arouse others enough that collectively they can place limits on management.

In basic supply and demand analysis the inframarginal economic units are satisfied with the status quo, and most of them are unlikely to react to small changes in price or quantity. It is the marginal buyers and sellers who, in the end, determine an equilibrium price and quantity. Similarly for a large corporation, even if most of the stockholders are inframarginal satisficers, those who are on the margin can affect managers' decisions with their behavior in the stock market. And if those on the margin
happen to be owners or potential owners of as little as even one percent of the voting stock, they may feel motivated to attempt more direct action to bring a recalcitrant management into line.

A quite different reason that profit performance may not be related to type of control evolves from the study of the bureaucratic organization of large firms. All of the theories discussed to this point have dealt only with the link between stockholders and managers, but actually equation (4) is relevant for decisions made by all employees of the firm. Certainly the terms of the equation take on different meanings for different employees, but the criterion is still applicable. For example, if a secretary is considering whether to use corporation postage and stationery for personal correspondence, she will probably assume that \( U(Y_d) \) equals the first term on the left side of (4), \( U(N_i) \) will be the utility she would receive from being honest and using her own stationery and stamps, while \( U(N_d) \) will be the utility she would receive from being able to spend her income in other ways and from the feeling of having exacted a higher real income from the firm. The \( P_g \) terms are probably of no importance in her decision, and the \( P_o \) terms would be reinterpreted to account for the probability of her being caught and punished by her immediate (or perhaps once-removed) supervisor. Such decisions are made daily throughout the entire organization but only rarely are given explicit recognition in discussions of the managerial hypotheses.

It might be said that a type of X-inefficiency pervades the whole corporation, that all employees suffer from (enjoy?) inertia until sufficiently prodded to change. Monsen and Downs (1965) discuss the bureaucratic tensions within an organization, but probably the most complete treatment is provided by Cyert and March (1963). They deal not so much with the inertia problems in a firm but more with economic rents received by the various
employees.

"Because of [the] 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"

If all members of the corporation play the game implied in equation (4), organizational slack will be rife throughout the chains of command shown in Figure (1). Whatever slack exists solely because of the separation of ownership from control may be infinitesimal relative to the total slack within the firm. In this case, the separation of ownership from control would have no measurable effect on a firm's profits because of the widespread prevalence of profit-reducing activity throughout the firm, not because of the absence of such activity by managers.

The arguments on both sides of the question can be summarized as follows: if managers' utility functions include variables other than profits and if the probability is low of stockholder action against managers who engage in profit-reducing activities, there will exist a correspondence between firms' profits and type of control. If, though, no such correspondence is
Figure 1  A simple organization chart.

- Stockholders, actual and potential
- Managers
- Division and department managers
- Junior executives
- Foremen and supervisors
- Production and clerical workers
observed, the managerial hypotheses cannot categorically be rejected. The hypotheses are incorrect if managers' goals are closely tied to profits so that managers have little incentive not to maximize profits, or if managers subjectively evaluate the probability of action by dissident stockholders to be high. But it may also be that the managerial hypotheses are just incomplete because they neglect the scope for discretionary action throughout the corporation. In this last case the theories of managerialism would not necessarily be wrong; they would simply be of no consequence for large corporations.
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Assistant Professor of Economics at The University of Western Ontario. The author would like to thank Professor L. B. Fletcher and C. W. Meyers for helpful comments on an earlier draft of this paper. If any errors remain, I will of course, assume the sole responsibility for them, but will always wonder why they were not called to my attention earlier.

1 Equations 1-4 are similar to a model of revolution presented by G. Tullock in a seminar at The University of Western Ontario (London, Canada,) October 30, 1971. See also Gary Becker (1968).

2 $U(C)$ is a positive quantity. The minus sign attached to it shows that there is a possible loss of utility.

3 The manager would not receive the full benefits of $\Delta \tau$ if some of this increase were kept by the owners or if some of it were paid to employees other than himself.

4 The model would have to be expanded considerably to include illegal and quasi-legal activities within firms which would increase their profits rather than reduce them. This expansion was not attempted here because most discussions of the effects of the separation of ownership from control are concerned with profit-reducing activities.