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ADMINISTRATIVE REGULATION VERSUS MARKET  
REGULATION IN THE DIVERSIFIED COMPANY

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# ADMINISTRATIVE REGULATION VERSUS MARKET REGULATION IN THE DIVERSIFIED COUNTRY

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The phenomenon of corporate diversification in the 1960's and 1970's has raised a debate about the effects of diversification on the performance of the firm. On one end of the spectrum, there is the view that the diversified company, while adding little or no value to its individual business units, creates the potential for a wide variety of anticompetitive practices such as reciprocity and predatory cross subsidization, and increases the aggregate concentration of economic power.<sup>1</sup> The opposite view holds that diversification has some decided advantages, relating in large part to its managerial properties. The diversified firm is said to allow for desirable spreading of risk,<sup>2</sup> to allocate capital internally more efficiently than the external capital markets do, and to bring to bear sophisticated, detached and unbiased management supervision on business entities where managerial slack would allow management inefficiency to survive indefinitely.<sup>3</sup> Evidence of the hypothetical undesirable practices described above, according to those who hold this view, is lacking.<sup>4</sup>

One central consequence of diversification that bears directly on these issues is a fundamental change in the nature of "regulation" of the individual business unit operating in a particular industry. Diversification means that the regulation of such business units either partially or totally passes from "purely" market mechanisms to the corporate office of the diversified corporation, which attempts to regulate business units through a set of administrative

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procedures. While some of the debate about diversification has dealt implicitly with the consequences of this shift,<sup>5</sup> it is clearly quite central to assessing the proposed managerial advantages of diversification and thus a more complete examination is in order. This shift in the nature of regulation also carries implications for competition in individual industries which need to be examined.

The purpose of the exploratory paper is to:

- I. Examine in a tentative way some characteristics and possible consequences of the shift to administrative regulation of the business unit, with special emphasis on how these differ from market regulation of the independent firm.
- II. Draw some possible implications of administrative regulation for resource allocation and other strategic decisions of the firm, as well as assess the possible impact of such regulation on some other aspects of firm behavior.
- III. Explore some of the most likely consequences overtime, of administrative regulation for the characteristics of the diversified firm's portfolio of business.
- IV. Examine the dynamics of competition in a mixed industry, or the industry composed of both independent entities regulated by the market and entities regulated through administrative mechanisms.

While we can only raise questions rather than provide answers in view of the myriad of administrative arrangements that are actually observed in place of diversified companies, our analysis will suggest some doubts about the unqualified attainment of the proposed managerial benefits of diversification, and raise some implications for the management of the diversified firm.



For purposes of this paper we examine the case of the diversified firm where no operational synergies exist among business units in the portfolio of businesses held by the corporate parent. That is, while there may be purely financial benefits to the portfolio, the non-capital costs of the individual business units are unaffected by their joint presence in the portfolio. While this assumption restricts our attention to what is commonly called the pure conglomerate, it allows us to concentrate our attention on the managerial implications of diversification alluded to earlier and is in practice probably a reasonable assumption for many large diversified firms.<sup>6</sup> Relaxing the assumption would complicate the exposition of our argument, but would not change the basic conclusions.

#### I. Administrative Regulation Versus Market Regulation

Let us now examine how administrative regulation of the business unit differs from market regulation. In market regulation, major pricing, promotion, resource allocation and other key business decisions are made by the Chief Executive Officer (CEO) of the independent business unit on the advice and counsel of his senior subordinates.<sup>7</sup> The consequences of those decisions are evaluated through the subtle operation of the product market mechanism, which determines the short and long term financial returns for the independent company. Capital for investment purposes comes from two primary sources. First, it is generated internally in amounts depending on the financial results of the firm. Second, it can be raised on the external debt or equity capital markets, based on their evaluation of the future of the firm, which is usually strongly influenced by the performance of other firms in its industry.

The CEO is at the top of the organization both in decisionmaking and career terms, and by definition can aspire to no higher position within



the organization. He and his subordinates are intimately familiar with the business and its characteristics, possessing extensive information and experience about it. Any information, reporting and control systems are in place to serve the CEO's needs in managing the particular business. While planning and forecasts are part of the management process, they are used as a management tool and the CEO is well aware of the uncertainties involved.

It is hard to generalize about how the CEO's salary is set, but it is undoubtedly influenced by the level of salaries paid by other firms of comparable size and by the general performance of the firm as compared to that of others in its industry. As for the performance itself, it is based on both short-run results and longer term, more intangible factors. Since the CEO usually has played a major role in selecting the Board, it may well be sympathetic to evaluating his performance and in any event is knowledgeable about the business as a result of its association with the firm. In fact the literature on takeovers suggests that there is a great deal of slack before poor results are translated into the wrestling of control from present management.<sup>8</sup>

In administrative regulation, pricing, promotion, resource allocation and other key decisions are made by the head of the business unit, who we call the Division General Manager (DGM), again with advice from his senior subordinates. However, these decisions are reviewed (in most cases formally) by one or more layers of corporate management superimposed over the DGM.<sup>9</sup> For simplicity, we will refer to the entire structure of corporate management as the Corporate Chief Executive Officer (CCEO). Providing review of major divisional decisions is a major element of the job of the CCEO. The CCEO also allocates capital, hires





and fires divisional management and sets their compensation. The DGM's hope is to become corporate management if they are successful.

Perhaps the central characteristic of corporate review is that the CCEO does not possess detailed and complete knowledge of the characteristics and ongoing status of the individual business units under his supervision. This is not a failing of the CCEO, but simply a reflection of the fact that he has multiple business units to review, is not actively managing all these business units on a day to day basis, and has bounded rationality (or is limited in time and cognition). This basic inability to know each business intimately has led to the common adoption of the divisionalized or profit center organizational structure in the diversified firm, where the CCEO delegates much of the day to day decisionmaking authority to division management who possess the relevant information.

Coupled with decentralization, however, is the institution of formal or quasi-formal corporate planning, budgeting, resource allocation, information and control systems. The latter provide the CCEO with selected measures for assessing the performance of divisions, give the divisions a common format for seeking capital and enable the CCEO to review what each division plans to do. These systems, usually standardized across divisions, are designed to give the CCEO that portion of information (from the very wide range of information the DGM possesses) he needs to review divisional decisions, in a consistent form to allow for more effective use and comparability. Since financial data often provide the only common denominator across divisions, these corporate systems are usually heavily financial in nature. In fact, the more diversified the firm the greater the likelihood for the review and control to be heavily financial in nature, and the more separated by layers of management the CCEO is from



DGMs. In addition to review, corporate management sets incentives for DGMs, again often based on a common system applied to all divisions.

The decisions of the DGM, ratified or altered by corporate management, are evaluated by the product market in much the same way as in the case of the independent firm, and short and long-term financial results are returned. Unlike the independent firm, however, capital resources are allocated to the division based on decisions of corporate management. They may bear no relation (in either direction) to the funds generated internally by the division, nor necessarily to what the external capital markets would have allocated to the division based on its performance were it a free-standing company. Capital allocation by corporate management necessarily involves a comparison among divisions which are in most cases heterogeneous, few of a kind to prevent normalization and in situations where capital resources are limited.

The DGM under administrative regulation, then, operates under a dual set of masters. He owes allegiance to the marketplace, which translates his decisions into financial results in the short and long term. However, he also owes allegiance to the administrative structure within which he operates. This structure has its own set of rules about what and how he is to be measured and compensated, and on the progress of his career. Even putting his own short run career interest aside, this structure will determine how much capital he receives to improve his business, and how much effective authority he has in making decisions. It is a structure which has an incomplete knowledge of his business and of the opportunities and constraints under which he operates. As a result, it is a structure that measures performance and potential with a limited and incomplete number of indicators, and where measures and measurements may be averaged



and applied uniformly to the whole portfolio of businesses. As we have already intimated and even if the CCEO wanted to apply standards of global rationality in the processes of review, evaluation and allocation of resources, to the extent that his portfolio includes heterogeneous entities, it is very unlikely that he can approach the rationality the markets impose on the independent firms of the industries represented in the portfolio. The process of averaging coupled with incomplete information will invariably cause distortions.

It would be surprising if the presence of this other structure did not affect the decisions of the DGM.<sup>10</sup> Bower's (1970) intensive clinical study of capital budgeting decisions in large diversified companies illustrates persuasively, and so does Ackerman's work (1968), that what we have called here an administrative structure does make a difference. Bower and Ackerman both indeed find that the corporate "context," or the array of systems in place in the organization, fundamentally affect the type of capital budgeting proposals initiated and presented to top management. Our task, then, is to examine how the administrative structure will affect the behavior of the division of the diversified company as compared to that of the independent firm.

## II. Administrative Regulation and Decisionmaking at the Divisional Level

Conceptually, administrative regulation could affect business unit decisions in two ways. It could alter the opportunity set facing the DGM as compared to the CEO of the independent firm, or it could affect the decisionmaking (or maximization) processes the DGM applies to the opportunity set vis-a-vis that which the CEO applies. While the resources of the diversified firm might indeed change the opportunity





set facing the DGM, we will assume here that the opportunity sets or range of strategies facing the DGM and CEO are the same, so that we may examine how the DGM operating under administrative regulation is likely to choose among those strategies as compared to the CEO of the independent firm.

The allocation of internal capital and the rewards and punishments applied to a DGM are determined by the administrative system or "rules of the game" described earlier, while external factors dominate both capital allocation and rewards and punishments for the CEO of the independent firm. As noted earlier, the internal measurement system is based on an inherently limited set of measures while the external evaluation of the independent firm by the product and capital markets is longer term and more subtle and multidimensional. Thus utility maximizing behavior for DGMs will likely diverge from that of CEOs.

Managers operating under administrative regulation will seek to understand the rules of the game set by that regulation and adapt their behavior accordingly. If they are successful, or "have a good track record," corporate management will rarely overturn their decisions. Top management will not get the chance to choose directly, but rather will be faced with very "good" proposals because of prescreening processes based on the DGM's "reading" of the administrative system, or, relatedly, must let proposals reaching them pass by default due to lack of information. A supporting point is that lack of time and information usually prevents top management from seeing alternative proposals for a given business decision, but rather an individual proposal it must either accept, reject or modify. The tradeoffs involved in selecting the "best" alternative are made at lower levels.



The observation that proposals to top management are rarely turned down is supported by Bower's work, which found that very few capital requests that actually reached top management were denied.<sup>11</sup> Similarly, few long-range plans are not accepted, and arguments over annual budgets tend to occur within fairly narrow ranges. Hence in examining the implications of administrative regulation, we must place a major focus on the decisions of the DGM and not the CCEO. While it is not possible to generalize completely, in view of the differences among diversified companies in the manner in which the administrative structure operates, we can highlight some potential areas of divergence between the division and the independent company which may occur.

#### A. Strategic Choices

Both the DGM and the CEO continuously face a range of strategic alternatives that can be arrayed by expected payoff, risk, time pattern of inflows and outflows (including their regularity), etc. They also face a set of alternatives with analagous characteristics when considering reactions to external disturbances or to competitors' strategic moves. The DGM will have more complete information on the opportunity set available than corporate management does, as well as better information about the reasons why opportunities may or may not be realized both ex ante and ex poste. In addition to the problem of limits on the quantity of information there also exists the potential problem of information impactedness that has recently been explored in the literature on organization theory, product choice and fraud.<sup>12</sup> While the DGM may know the true probabilities of alternative outcomes occurring as a result of strategy choices, or at least have the best estimates of these in the corporation, it is extremely difficult for



him to communicate these credibly to his superiors. The latter may see his estimates of the true probabilities of downside events as overly pessimistic to protect his position, and his estimates of the true probability of upside outcomes of proposed strategic choices as overly optimistic to get his plans approved. Thus even though both the DGM and CCEO might benefit from communicating the "truth," this is difficult to achieve. No such problems or much less of a problem exists for the CEO, who needs no approval for strategic choices.

In view of the informational differences between administrative regulation and market regulation, we might expect them to be reflected in strategic choices by the DGM that are different than those of the CEO in a number of respects:

1. Strategy Choices With Shorter Time Horizon for Achieving Results:

In the presence of incomplete measurement by the corporate office, there is a tendency for the time horizon of the DGM to be shorter than that of the CEO.<sup>13</sup> He is less likely to make choices which will take a long period to be reflected in results, or which build goodwill, than the CEO, because corporate management's poorer information and the problem of information impactedness makes it difficult for them to understand and accept his justification that the future will show the necessary benefits of present sacrifices.<sup>14</sup> Further, the normal review period for the plans and the results of operation for the CEO is quarterly or possibly annually, while frequently monthly reviews are held by the CCEO for his DGMs. Adopting strategies which require short-run sacrifices invites questions and interference by well-





meaning top management, while strategies with lower returns but quicker results may bring praise and autonomy.

The tendency towards strategies with short feedback is reinforced by the DGM's need to compete for capital on a year by year basis with other units in the corporation (unlike the independent firm which can operate on a less regular and constrained schedule). The DGM, needing to win continued capital investments in the annual corporate-wide competition for capital, will often be under pressure to show some promising results from year to year to secure this allocation. There is also the possibility, that has been noted by many, that the DGM will get promoted elsewhere before the results of long-term actions are registered, and he may adopt strategies with short-run payoffs to facilitate his rapid advancement. Another often noted force working in this direction is for the measurement and incentive system stressing single measures of performance, such as ROI, to place emphasis on short-term performance.<sup>15</sup> While shorter-time horizon strategies may not always be adopted by divisions as compared to the independent firms, the pressures are evidently there.

2. Less Willingness to Adopt Risky Strategies:

When one considers the implications of the administrative structure described above, it may well be that the DGM is willing to take less risk in strategic choices than the CEO of the independent firm. The DGM is continuously measured and rewarded on the basis of mainly financial results, and seeks approval and advancement from corporate management. Despite the ability of the diversified corporation as a whole to withstand failures, it



is extremely difficult to shield the DGM from the adverse affects of a prudently attempted move which results in failure.

The cause is a variant of the informational problems described above. It is hard for the DGM to communicate credibly and on an ex ante basis accurate probabilities of failure of risky strategies. Ex post, his explanation can be read as excuses, and failures interpreted as the lack of trying hard enough to implement effective strategies. In this environment, failure is often very costly to the DGM. Failure reduces the DGM's chances for advancement, and reduces his future credibility in securing internal capital (including that capital which he is generating internally in his own division). Although his direct superiors at the time may understand and accept the failure as the consequence of a prudently taken risky decision that was implemented as effectively as possible, this information is difficult to communicate to others in the organization and to successive superiors. Even one failure can become a semi-permanent and often intangible blemish on a manager's record, affecting him adversely in his dealings with others in the organization.

Stating these arguments more formally, the DGM will be risk-averse relative to the CEO because the penalty for failure he faces is greater. It can also be argued that the DGM is less likely than the CEO to capture the rents of a "big win," given his difficulty in communicating true probabilities of success ex ante. With full blame for failures and less than full credit



for successes, risk aversion may well result. The CCEO cannot force the DGM to take appropriate risks because the CCEO does not know the opportunity set facing the DGM. Thus although the CEO of an independent firm will not likely risk bankruptcy, he may well be more willing to risk small or modest failures than the DGM.

These arguments raise a paradox. We noted earlier that one of the potential benefits of the diversified firm was a greater ability to take risks, and the diversified firm may indeed have the resources available to bear greater prudent business risks. Looking at the consequences of administrative regulation, however, there are some plausible conditions under which the opposite behavior may be expected from the strategic decisionmaker, the DGM. While this will not necessarily hold in all cases, some forces working in this direction are evidently present that must be overcome if the benefits of diversification for risk-taking are to be realized.<sup>16</sup>

3. Greater Propensity to Adopt Strategies that Have Predictable Outcomes and are Readily Explainable:

Corporate management's incomplete information coupled with their frequent review of the DGM suggest that the DGM may be more likely to emphasize strategic choices whose future results are predictable than the CEO. He may also be more likely than the CEO to choose strategies for which the justification for making the choice is explainable in simple, intuitive, logical terms, rather than by arguments resting on faith, on the ability to create or innovate, on intuitions about industry changes or on competitive moves.





The CCEO will have an inevitable tendency to evaluate DGMs on whether there were "no surprises," whether they "delivered" on their promises, and on the degree to which their plans and expectations about future outcomes proved to be accurate. While such criteria have their merits in evaluating managers, because of incomplete information, the CCEO finds it difficult to separate unplanned outcomes which arose because of poor planning from those that occurred because of legitimate market uncertainties. If this separation cannot be made, the DGM will be pushed to adopt strategies which have lower expected profit outcomes but which have future consequences that are easy to predict. That is to say, he prefers the lower profit level because of the lower variance. A reinforcing tendency is created by CCEO's role in monitoring divisional performance on an ongoing basis. In this capacity the CCEO can potentially make the DGM uncomfortable with scrutiny, questioning, and potential interference in decisionmaking (reduction in autonomy) if unpredictable and unplanned events occur. Finally, depending on the nature of the corporate incentive system, unplanned adverse outcomes may hurt the DGM's compensation which he cannot recover through unplanned positive outcomes. The DGM who selects a strategy with predictable results that actually occur according to plan, raises the confidence of corporate management in him. This credibility may boost his chances in the race for corporate capital, and allow him to manage his business free from intervention.

In the same vein, as the predictability in outcomes, is the explainability of strategy choices in simple logical terms. While



the CEO does not have to articulate the reasons for his choices to imperfectly informed "outsiders," the DGM does. To fulfill their role as reviewers, corporate management will insist on explanations for critical choices, and will be likely to accept only explanations they can understand. These may well be explanations that rest on specific data and are logically appealing, and which do not rely on highly specialized technical knowledge, on judgments, instincts or "feel," despite the fact that these may be wholly accurate. Furthermore the "chances" the DGM takes will have to be explainable in financial terms while the CEO may have more leeway in adopting strategies that cannot be justified solely in financial terms especially in the short run.

4. Less Weight on Psychic or Professional Payoffs Versus Financial Payoffs in Strategy Choices:

The greater emphasis on strategies that can be explained in financial terms and the separation between corporate management and the business, suggest that less weight may be placed on psychic or professional payoffs by a DGM in his strategic choices than by a CEO. Staying in a particular geographic area of community, maintaining technological leadership (even if it does maximize long run profits) and other factors which offer psychic rewards to managers will inevitably be valued less by a central and "foreign" management not intimately involved in the business. Thus a division will be less likely to value these sorts of nonprofit-maximizing payoffs in strategic choices which often seems very important to the independent firm, or saying it another way, division management will probably have fewer non-financial arguments in their utility functions.



## B. Implications for Innovation

The aforementioned observations as a group carry some potential implications for innovation by divisions of diversified firms relative to independent companies. We have identified pressures on the division of the diversified company which may make it less willing to engage in risky research and development, less likely to introduce or even later adopt radical innovations, which may increase the variance in the plans, although the expected profits<sup>17</sup> and duration of such may increase, and less likely to make major changes in strategic positioning than the independent firm, other things being equal.<sup>18</sup> These same forces suggest that the division might also be less creative and pioneering in its strategic choices generally than independent firms.

Once again, then, we have a paradox between the potential benefits of diversification and an administrative analysis of the incentives facing the decisionmaker. Forces are present which operate against innovation in the division, requiring countervailing forces if the diversified firm is to realize its potential in nurturing innovative activity.<sup>19</sup>

## III. Administrative Regulation and the Business Portfolio

### A. Investment

Administrative regulation replaces market allocation of capital with an internal capital allocation process. While market allocation is based on a subtle and multidimensional set of market outcomes, administrative capital allocation may not be.<sup>20</sup> A consequence of corporate management's incomplete information about each individual business and the absence of many homogeneous entities for comparability, is that it may be unable to fully discern differences in risk among



investments in different divisions. Impacted information complicates the assessment of true risk, and we have described above some reasons why risk may be underestimated. These and other characteristics of administrative regulation have implications for how capital is allocated from the corporation to divisions relative to allocations from the market to free-standing companies, and how the portfolio of businesses in the diversified firm may develop over time.

The most basic difference between capital allocation in the division relative to the free-standing firm is that the division will inevitably be judged against other units in its diversified parent, while the free-standing firm has sure access to at least its internally generated funds and its external funds requests are judged against the general population of firms. Take the case of two divisions of similar riskiness and facing similar opportunity sets. The division lodged in a parent company with several "better" performing divisions which are ravenous consumers of capital will likely get less capital than the same division in a parent with other divisions in a capital generating mode. That is, the opportunity cost of capital for the particular diversified firm, and hence its hurdle rate for internal investments in a division, may be greatly different from the opportunity cost of capital accorded by the external capital markets to the free-standing firm in the same industry as the division even if the division and free-standing firm are equally risky. The capital may be over or under supplied to the division relative to the free-standing firm, and also relative to the socially optimal level. Thus the capital investment choices of a division are much more dependent on its specific ownership situation than those of the free-standing firm.





If corporate management cannot fully discern ex ante differences in risk among the capital investment proposals of its divisions, and each division is not assured of even its internally generated funds but depends on the outcome of the corporate capital allocation procedure, what might some of the consequences be for the behavior of the portfolio of businesses in the diversified company over time? To examine this question, let us make the extreme assumption that because of incomplete and impacted information, corporate management cannot perceive ex ante the risk differences among divisions at all, and assigns a single hurdle rate for investments qualifying for corporate capital. This simplifies understanding of the effects to be described, but formally, any underestimate in the perception of risk differences is sufficient to lead to the conclusions reached. Let us further assume that businesses with higher risk tend to have higher expected rates of return and also have more high return investment projects than lower risk businesses. Finally, we assume that the high risk/high return businesses tend to be earlier in their life cycle, and thus have a greater net appetite for capital than the lower risk businesses.

Under the circumstances we have posited, corporate capital will be allocated to the high risk businesses and not to the lower return, lower risk businesses. The single hurdle rate, set at the opportunity cost of capital for the firm, will insure this result. Unsupported by capital investment, the performance of lower risk businesses will deteriorate as will their cash generating ability. And even if these units do not initially deteriorate, they will contract relative to the high-risk units, and their relative importance within the firm



diminish. Reduced cash generation accentuates their starvation, because even less capital is available to them after allocation to the high risk businesses. Eventually the lower risk businesses become candidates for liquidation. Liquidating them raises the hurdle rate even more, further accelerating the flow of capital to the higher risk divisions.

Over time, then, the diversified firm will be starved of investment funds by weeding out the capital generators in the portfolio, and will increase the overall risk in the business portfolio. In the limit, this will result in bankruptcy of the firm because the subsidized risky divisions will be unable to absorb their long run costs once the less risky businesses have been eliminated. In practice, bankruptcy is unlikely to result but rather a cyclical phenomenon in corporate investment behavior will be observed. Once the dynamic escalation in risk results in capital constraints and sporadic failures, the corporate office is likely to intervene and radically change corporate policies to emphasize internal capital generation and risk reduction. That is, decision rules will shift to reflect the desire to avoid the last disaster. Capital will be denied higher risk divisions, and some may be divested, to restore the parent's financial stability. Once financial stability is regained, however, the same dynamic risk escalation may begin anew, unless management fully appreciates the reasons behind these cyclical patterns of behavior and develops a balanced approach to risk management.<sup>22</sup>

The single hurdle rate will also produce behavior at the division level which will reinforce this dynamic result. Facing the single overly high average cost of capital, low-risk divisions will set



prices higher than otherwise, worsening their position vis-a-vis free-standing firms and shrinking their capital needs. High-risk divisions, conversely, will be misled by the cost of corporate capital and will set prices lower than they would as free-standing entities. This will increase their growth rates and market shares, and increase their desire for capital to expand. It will also send false signals (mounting orders, backlogs and delivery delays) to corporate management about the underlying soundness of their business strategies.<sup>23</sup>

We have yet another apparent paradox as a result of these arguments. In our dynamic model, the CCEO unknowingly acts like a risk lover in stark contrast to our argument that the DGM may be more risk averse than his counterpart in the independent firm. However, this behavior is not contradictory. The DGM is more risk averse than the CEO because of the greater penalty he pays if failure occurs. The DGM has estimates of the probability of failure of alternative strategies. Under the forces of administrative regulation, he will reduce the risk of failure in his strategy as much as he can, given the nature of the particular business, and still achieve satisfactory financial results. Unless every DGM can eliminate all risks, however, there will still be a portfolio of businesses facing the CCEO with different risk/return combinations.

The CCEO acts like a risk lover because of his poor ex ante information about the risk characteristics of each individual business. If one of the businesses performs poorly, then the CCEO knows it ex post and penalizes the DGM. However, the CCEO does not know the a priori probability that each business will experience a failure and thus is



likely to overpenalize the DGM.<sup>24</sup> Thus the different behavior towards risk of the two levels of management is a reflection primarily of the fact that the DGM knows the true prior probability of failure in his business better than the CCEO does.

B. Disinvestment:

Administrative regulation alters the possibilities for disinvestment by a business unit. For the independent firm, the cost of disinvestment is extremely high. Disinvestment requires either finding a new business area to invest in (diversification), or returning capital to the shareholders either gradually or in a lump sum through liquidation. A variety of factors make these choices difficult for a CEO to make.<sup>25</sup> The market mechanism can refuse new capital to a firm (both by reducing internal generations directly and by limiting access to the capital markets), but the market has difficulty taking capital out of a firm except in extreme cases of outright losses or takeovers.

Administrative regulation, on the other hand, cannot only refuse capital to a division, but can also decide to take capital out, either through liquidation or by means of an explicit strategy of "milking" the division. It has the potential of being less affected by emotional attachments to particular businesses, though in practice this potential is not always realized.<sup>26</sup> Thus administrative regulation may well facilitate economically appropriate disinvestment relative to disinvestment in free-standing firms. It is likely to also facilitate changes in poorly performing management, for similar reasons. Under the assumptions of our dynamic model above, this facilitated disinvestment can accentuate the difficulties





in risk balancing of the portfolio. It can also, however, result in social benefits in cases where a division is earning truly sub-normal returns.<sup>27</sup>

#### IV. Competition in the "Mixed" Industry

After the extensive diversification of the 1960's and 1970's, many industries in the U.S. economy have become "mixed" industries composed of both free-standing firms and divisions of diversified companies. How might our analysis of the consequences of administrative regulation be reflected in the patterns of competition in such industries?

Since administrative regulation may affect strategy choices, the first implication of our analysis is that the competitive strategies of free-standing firms and divisions may well differ systematically within an industry. The free-standing firms may be greater risk takers, operate with longer time horizons, and be more creative strategically, *ceteris paribus*. Administrative regulation potentially alters the goals of divisions versus free-standing firms, and this is reflected in their competitive behavior.

A second implication of our analysis follows from the discussion regarding the diversified company portfolio. The division's competitive behavior will be affected by the particular financial status of its corporate siblings, while the independent firm is more dependent on capital market evaluation relating to the characteristics of the particular business. In addition, the division may be a more or less dangerous competitor to the free-standing firm depending on the nature of the industry. In the stable, mature industry, the division may be excessively starved for capital for the reasons discussed earlier. However, in the risky industry the subsidized division may make "irrational" pricing and expansion decisions



from the point of view of the free-standing firm because of its lower, subsidized cost of capital. Thus such divisions may tend to grow faster and may force the free-standing firm to adopt the relatively risky strategies in the industry that the division will try to avoid. The division will tend to adopt the least risky strategies possible in the risky industry given administrative regulation. In a cross section of industries, we might expect to see divisions attain lower market shares and perhaps higher profits than independents (because they will be harvesting) in stable industries, and higher market shares but lower profits (due to conservative strategies) than independent firms in risky industries, other things being equal.

V. Summary and Implications

While it appears to facilitate the shifting of capital out of inefficient units and the replacement of poor management, the properties of administrative regulation raise questions about the achievement of many of the supposed benefits of diversification, and create potential for differences in the behavior of divisions of diversified firms and independent firms. Though there are some arguments for why capital allocation may be facilitated, it can be also misallocated within the portfolio of businesses in the diversified firm. Achievement of the potential benefits of diversification in risk spreading and innovation faces the problem of overcoming forces working in the opposite direction. In fact, as we have argued the opposite forces are likely to be dominant. And while a dispassionate, professional review of division strategies by corporate management may yield better strategic choices in some cases, incentives are created in the process which may lead to suboptimal strategy choices from the point of view of the corporation.



The differences between administrative and market regulation carry possible implications for industry competition which have been discussed. The use of a single hurdle rate of return for allocation of capital will most likely encourage over expansion of the risky and contraction of the low-risk divisions, possibly leading to excess capacity and lower prices as compared to free-standing competitors in the case of the former, and the opposite in the case of the latter divisions. The differences observed also carry implications regarding the relations of the firm to its suppliers and customers. Divisions and free-standing firms may well have different propensities in accepting projects or signing contracts with given time horizons and risk profiles. Similarly, when a free-standing firm becomes part of a diversified firm its strategy and its relations with customers and suppliers may change in ways suggested in the discussion above.

These consequences of administrative regulation raise a challenge to the corporate management of the diversified firm. The challenge is to find ways to eliminate the biases we have described. Some of the recommendations flowing from our analysis are as follows. First, it may be important to judge strategies and investment projects as total projects and not on a "day by day" basis. Corporate review should be carried out relative to the business plan and the expected level of predictability that the plan calls for. Incentive and control system that measure only financial performance should be supplemented by measurements which capture long run changes in the total position of the business unit such as market share, customer satisfaction and loyalty, changes in product quality, changes in management and employee turnover.

In planning and capital budgeting systems, one may ask for alternative strategies which are more risky and less risky than the proposed



strategy. This approach will improve choices by exposing the uncertainties involved in the alternatives more fully and posing risk/return tradeoffs to top management. Incentive systems should be designed with enough flexibility so as not to discourage taking prudent risks and also not discourage the sacrifice of short-run profits for longer-run projects with appropriate higher returns. Finally, corporate management must strive to create a climate where those responsible for failures resulting from well planned and well executed decisions under uncertainty, are not penalized and their careers as managers are not ruined. Implementing these suggestions is no easy task, but doing so may offer benefits in the quality of performance for the diversified firm and its component parts.





Footnotes

- <sup>1</sup>For a survey see Scherer, F.M., Industrial Market Structure and Economic Performance, Rand McNally, 1970, Chapter 12 and Markham, J.W., Conglomerate Enterprise and Public Policy, Division of Research, Harvard Graduate School of Business Administration, 1973, Chapter 2.
- <sup>2</sup>For example, Shumpeter, Joseph, Capitalism, Socialism and Democracy, Harper, 1950, and others have argued that the large diversified firm will be more innovative due to its ability to maintain a portfolio of research projects rather than only a few where its risk of a failure would be prohibitive. Risk spreading is socially beneficial if it is assumed that investors cannot fully diversify their investment portfolios due to indivisibilities or information and transactions costs.
- <sup>3</sup>For example, Scott, B.R., "The Industrial State: Old Myths and New Realities," Harvard Business Review, Volume 51, Number 2, March-April 1973, pp. 133-148.
- <sup>4</sup>Markham, J.W., Conglomerate Enterprise and Public Policy, Division of Research, Harvard Graduate School of Business Administration, 1973.
- <sup>5</sup>See among others, Chandler, A.D., Strategy and Structure, MIT Press, Cambridge, Mass., 1962, and Rumelt, R.P., Strategy Structure and Economic Performance, Harvard University Press, Cambridge, Mass., 1974.
- <sup>6</sup>The lessons of the recent merger wave had led many executives to reexamine the feasibility of achieving operational synergies in practice.
- <sup>7</sup>In both the independent firm and the diversified firm, top management decisions are formally ratified by the board of directors. In keeping with the prevailing view that in practice the board of directors often acts passively and rarely overturns management's decisions, we will largely ignore the role of the board in this paper. See Mace, Myles, Directors: Myths and Reality, Division of Research, Harvard Graduate School of Business Administration, 1974.
- <sup>8</sup>See Hindley, B., "Separation of Ownership and Control in the Modern Corporation," Journal of Law and Economics, April 1970.
- <sup>9</sup>The DGM might report directly to the corporate chief executive officer, or through one or more group executives who supervise a number of divisions. For simplicity we will talk in terms of a single reviewing executive; multiple layers of review would face many of the same pressures as the DGM and pass incomplete information.



- <sup>10</sup> One can draw an analogy to the problem of rate of return regulation of public utilities, that have received much attention by economists. There the regulatory agency allows prices to be set to achieve a target rate of return on the rate base, but is unable to measure the efficiency of individual capital investments which add to that rate base. Under these circumstances, the utility is led to overinvest in capital from society's point of view. The general problem is one of imperfect control leading maximizing agents to emphasize the controlled variables over non-controlled variables that may be equally important to society. See Baumol, W.J. and A.K. Klevorick, "Input Choices and Rate of Return Regulation: An Overview of the Discussion," Bell Journal of Economics, Autumn 1970, pp. 162-190.
- <sup>11</sup> Bower, J.L., Managing the Resource Allocation Process, Division of Research, Harvard Graduate School of Business Administration, 1970. This weeding process before a formal decision is reached also occurs below the CEO in the independent firm, but the CEO is more likely to be involved directly in the process of project/plan definition and possesses ample information with which to challenge the underlying assumptions of proposals which look good on paper.
- <sup>12</sup> Williamson, O.E., "The Vertical Integration of Production: Market Failure Considerations," American Economic Review, May 1971.
- <sup>13</sup> The exception is that the CEO may tend to be more swayed by short-term stock market considerations. These arguments, however, should not be confused with the impact of administrative regulation on decisionmaking involving projects of different ex ante risk. We will take up this issue later in Section III.
- <sup>14</sup> The same general effect has been extensively discussed in the literature on the evils of using a single measure such as short term ROI as a control device. See for example, Dearden, John, "Limits on Decentralized Profit Responsibility," Harvard Business Review, November/December, 1962, and "Problems in Decentralized Financial Control," Harvard Business Review, May/June, 1961. While a corporate measurement and control system may contain a variety of measures besides ROI, the central fact remains that corporate management's knowledge will never be as complete as that of the DGM, and thus the bias against accepting longer term qualitative factors as explanations for diminished current results will remain.
- <sup>15</sup> One of the key underlying assumptions here is that lower-level management has a more limited scope and its attention must be focused by the information and control system. In the choice and simplicity of the single measures of performance a lot of uncertainty and complexity is absorbed by higher level management and in this way the DGMs are relatively shielded.
- <sup>16</sup> One way of overcoming the consequences of the risk aversion manifested in the divisional plans of a firm, is for corporate management to elicit risky proposals and choose some of these for subsidization.
- <sup>17</sup> Properly discounted.



- 18 If R&D expenditures are made a corporate charge rather than charged to the division, this will create forces working in the opposite direction. However, since the risk of failure and not the cost of R&D is at the heart of the problem, the division may engage in R&D without actually implementing potentially valuable R&D results.
- 19 These potential biases raise the question of why the CCEO does not remove himself from the regulatory bias, confining his attention to raising capital, external relations and the like. The answers are numerous. First, measurement, control and review are defined as the role of the CCEO in current management practice. Second, review and intervention by the CCEO does perform a useful function especially in cases of mismanagement and its positive benefits are difficult to disentangle from the possible consequences outlined above. Finally, there may be a variation of the principle that nature abhors a vacuum operating, where the CCEO seeks involvement to show his value to the organization.
- 20 In the case of the capital markets in spite of segmentation we often find many, more or less similar, firms competing for funds. So the imputed cost of capital to a specific firm reflects the risk associated with the general activities of the firm.
- 21 Corporate management could overestimate risk differences, but the properties of administrative regulation appear to favor underestimation. Furthermore, many processes of cost allocation within firms, for example overhead, tend to reinforce any process "averaging."
- 22 Patterns with qualitative characteristics such as these have occurred in recent years at General Electric, Westinghouse, Litton Industries, Pneumo and other diversified firms.
- 23 The overhead allocation process will bring about similar results, if it arbitrarily averages over many heterogeneous departments and product lines which have different overhead intensities.
- 24 We often find an inconsistency in the "penalties," which favors the risky divisions. Although the a-priori risk may not be used to determine the appropriate cost of capital, corporate management is more likely to dismiss lack of performance in the case of the high-risk divisions with the statement " . . . it is a risky business."
- 25 See Porter, M.E., "Please Note Location of Nearest Exit: Exit Barriers and Planning," California Management Review, Winter 1976.
- 26 See Porter, M.E., "Please Note Location of Nearest Exit: Exit Barriers and Planning," California Management Review, Winter 1976.
- 27 The life of free-standing firms is often uneconomically prolonged even after the market has repeatedly refused additional capital. Vendors, the managers and in some cases family friends provide the sustenance.







