

INFLUENCES OF DISCRETION IN CHIEF EXECUTIVE OFFICER COMPENSATION
IN INTERNATIONAL CORPORATIONS

By

Kenneth N. Granberry

A DISSERTATION

Submitted to

H. Wayne Huizenga School of Business and Entrepreneurship
Nova Southeastern University

In partial fulfillment of the requirements
For the degree of

DOCTOR OF INTERNATIONAL BUSINESS ADMINISTRATION

2005

A Dissertation
Entitled

INFLUENCES OF DISCRETION IN CHIEF EXECUTIVE OFFICER
COMPENSATION IN INTERNATIONAL CORPORATIONS

By

Kenneth N. Granberry

We hereby certify that this Dissertation submitted by Kenneth N. Granberry, conforms to acceptable standards, and as such is fully adequate in scope and quality. It is therefore approved as the fulfillment of the Dissertation requirements for the degree of Doctor of International Business Administration.

Approved:

James Mirabella, D.B.A.
Chairperson
Date: _____

Pedro Pellet, Ph.D.
Committee Member
Date: _____

Richard Murphy, D.B.A.
Committee Member
Date: _____

Russell Abbratt, Ph.D.
Chair of Doctoral Research
Date: _____

Preston Jones, D.B.A.
Associate Dean, Huizenga School of Business and Entrepreneurship
Date: _____

Nova Southeastern University
2005

CERTIFICATION STATEMENT

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions or writings of another.

Signed: _____
Kenneth N. Granberry

ABSTRACT

INFLUENCES OF DISCRETION IN CHIEF EXECUTIVE OFFICER COMPENSATION IN INTERNATIONAL CORPORATIONS

By

Kenneth N. Granberry

The influence of chief executive officers and determinates of their compensation have been the subject of much research with mixed results. Findings have ranged from CEO's having little influence to their being of primary importance. Hambrick and Finkelstein's (1987) discretion theory created a theoretical bridge to explain much of this variance.

Their concept of discretion offered an explanation as to why some executives influenced greatly while others had little influence. According to Hambrick & Finkelstein, those executives with greater freedom to implement decisions can significantly shape their organizations; whereas those with greater constraints and less freedom will be less able to do so.

The purpose of this research was to evaluate the relationship of managerial discretion, CEO compensation, shareholder return, and corporate performance of international companies that are publicly traded in the U.S. The research questions investigated were: (1) Is there a significant difference in the average two-year CEO compensation across the three levels of management discretion for international corporations publicly traded in the United States? (2) Is there a significant difference in the two-year average shareholder return across the three levels of management discretion for international corporations publicly traded in the United States? (3) Is there a significant difference in the two-year average return on equity across the three levels of management discretion for international corporations publicly traded in the United States? (4) Is there a significant difference in the two-year average net operating profit rate of return across the three levels of management discretion for international corporations publicly traded in the United States? (5) Is there a significant difference in the two-year average price/earnings ratio across the three levels of management discretion for international corporations publicly traded in the United States?

The results of this study support the influence of discretion theory on shareholder wealth, and point to the potential influence of discretion theory in corporate performance and compensation. Shareholder expectations reflect the market's assessment of future earnings, which are affected by firm performance, and in turn effect CEO compensation.

TABLE OF CONTENTS

List of Tables.....	6
Chapter	
I. INTRODUCTION.....	7
II. REVIEW OF LITERATURE.....	15
III. METHODOLOGY.....	44
IV. ANALYSIS AND PRESENTATION OF FINDINGS.....	52
V. SUMMARY AND CONCLUSIONS.....	58
REFERENCES CITED.....	64
BIBLIOGRAPHY.....	79

LIST OF TABLES

Table	Page
1. RATING OF MANGERIAL DISCRETION.....	39
2. CEO COMPENSATION FACTORS.....	41
3. KRUSKAL-WALLIS TEST OF HYPOTHESIS ONE.....	52
4. KRUSKAL-WALLIS TEST OF HYPOTHESIS TWO.....	53
5. KRUSKAL-WALLIS TEST OF HYPOTHESIS THREE.....	55
6. KRUSKAL-WALLIS TEST OF HYPOTHESIS FOUR.....	56
7. KRUSKAL-WALLIS TEST OF HYPOTHESIS FIVE.....	57
8. KRUSKAL-WALLIS TEST OF HYPOTHESIS SIX.....	52

CHAPTER I

INTRODUCTION

Background of the Problem

There has been considerable debate among researchers regarding the importance of the chief executive officer. Authors, such as Lieberman and O'Connor (1972) and Salancik and Pfeffer (1977), have argued that top leaders have little impact on their organizations due to the external environments within which their organizations operate, or internal inertia within their organizations. Others, such as Kotter (1982), Hambrick and Mason (1984), and Kets de Vries and Miller (1986), have suggested that organizations' strategic choices and organizational performance are very much impacted by top executives (Finkelstein & Hambrick, 1990; Wright & Kroll, 2002).

In 1987, Hambrick and Finkelstein created a theoretical bridge between those who felt the chief executive had little impact and those who thought the impact of the chief executive was significant. Their concept of "discretion" offered an explanation as to why some executives influenced greatly while others had little influence (Finkelstein & Hambrick, 1990). According to Hambrick & Finkelstein, discretion is the level of freedom or constraint faced by management. Those executives with greater freedom to implement decisions, with relatively fewer constraints, can significantly shape their organizations; while those with greater constraints and less freedom will be less able to do so (Finkelstein & Hambrick, 1990).

In 1995 Hambrick and Abrahamson developed measurable constructs for gauging environmental discretion, and established a listing of 71 industries specifying the level of discretion in each. This research provided a tool that has furthered research into the effects of managerial discretion in executive compensation, strategic inertia, succession patterns, and administrative intensity (Hambrick and Abrahamson, 1995).

Murphy furthered the study of the influence of discretion by relating CEO compensation to corporate profitability and shareholder return in low, medium, and high discretion industries (Murphy, 1999). While Wright and Kroll (2002) extended research into executive discretion and performance by relating CEO compensation to levels of discretion, performance and the presence or absence of external monitoring.

Up to this point, considerable research has been developed regarding discretion theory in executive compensation at domestically operating U.S. firms. However, the rising pace of globalization, and the increasing need for the development of effective international compensation practices make research on international companies of critical importance (Lowe, Milliman, De Cieri, & Dowling, 2002). Some writers have pointed out that the primary objectives of international compensation are no different from domestic objectives - to attract, retain, and motivate employees (Crandal & Phelps, 1991). However, the legal, political, and social environments, economic conditions, employment practices, taxation, customs, currency fluctuation, and inflation are varied amongst countries, and are continually changing (Dowling, Welch, & Schuler, 1999).

Consequently, not only are the cross-cultural issues significant and real, but the very fundamentals of the mechanics of compensation must be reassessed (Laabs, 1996).

Statement of the Problem

While research on domestic firms has provided significant support for Hambrick and Finkelstein's theory of managerial discretion, no researchers have examined the effects of discretion on CEO compensation and corporate performance in international companies (Murphy, 1999). This study will focus on the influence of discretion in CEO compensation and corporate performance by relating CEO compensation to corporate profitability and shareholder return in international corporations from low, medium, and high discretion industries. Consequently, this dissertation will add to the knowledge base of Hambrick and Finkelstein's work on managerial discretion theory.

Purpose of the Research

The purpose of this research is to evaluate the relationship of CEO compensation, shareholder return, return on equity, net operating profit, and price/earnings ratios of international companies that are publicly traded in the U.S. The study will examine data from international companies that are traded on U.S. exchanges in low discretion, medium discretion, and high discretion industries to determine the linkage of discretion levels, C.E.O. compensation, and significant performance results of the firms.

Research Questions

This study will investigate the following research questions:

1. Is there a significant difference in corporations' two-year average CEO compensation across the three levels of management discretion for international corporations publicly traded in the United States?
2. Is there a significant difference in corporations' two-year average shareholder return across the three levels of management discretion for international corporations publicly traded in the United States?
3. Is there a significant difference in corporations' two-year average return on equity across the three levels of management discretion for international corporations publicly traded in the United States?
4. Is there a significant difference in corporations' two-year average net operating profit rate of return across the three levels of management discretion for international corporations publicly traded in the United States?
5. Is there a significant difference in corporations' two-year average price/earnings ratio across the three levels of management discretion for international corporations publicly traded in the United States?

Research Hypotheses

The hypotheses for this research study were derived primarily from the work of Hambrick and Finkelstein (1987), Finkelstein and Boyd (1998), and Murphy (1999). The null and alternative hypotheses are:

Hypothesis HO1 (null):

There is no significant difference in the two-year average CEO compensation across the three levels of management discretion.

Hypothesis HA1 (alternate):

There is a significant difference in the two-year average CEO compensation across the three levels of management discretion.

Hypothesis HO2 (null):

There is no significant difference in the two-year average shareholder return across the three levels of management discretion.

Hypothesis HA2 (alternate):

There is a significant difference in the two-year average shareholder return across the three levels of management discretion.

Hypothesis HO3 (null):

There is no significant difference in corporations' two-year average return on equity across the three levels of management discretion.

Hypothesis HA3 (alternate):

There is a significant difference in corporations' two-year average return on equity across the three levels of management discretion.

Hypothesis HO4 (null):

There is no significant difference in corporations' two-year average net operating profit rate of return across the three levels of management discretion.

Hypothesis HA4 (alternate):

There is a significant difference in corporations' two-year average net operating profit rate of return across the three levels of management discretion.

Hypothesis HO5 (null):

There is no significant difference in corporations' two-year average price / earnings ratio across the three levels of management discretion.

Hypothesis HA5 (alternate):

There is a significant difference in corporations' two-year average price / earnings ratio across the three levels of management discretion.

Definition of Terms

The following terms are defined relative to their use in this study:

CEO: The chief executive officer of the corporation. Holder of the title and so named in the corporation's annual report.

CEO Compensation: Annual salary and bonus paid to the corporation's chief executive officer.

CEO Pay: Used interchangeably with CEO Compensation

Net Operating Profit Rate of Return: Two-year average rate of return on assets before interest and taxes. Used in this study as a determinant of managerial effectiveness.

Return on Equity (ROE): Company's two-year average return on common equity. Used in this study as a determinant of corporate performance and managerial effectiveness.

Shareholder Return: Share price appreciation including reinvested dividend of the corporation.

Price / Earnings: Market value of the company's stock relative to its profitability.

Management Discretion: Available latitude of decision and action Chief Executive Officers have in making choices.

International Companies: Companies with 40% or more of their revenues obtained outside of the United States.

Summary

This study is designed to examine the relationship of managerial discretion (low discretion, medium discretion, and high discretion) to CEO compensation, shareholder return, corporate profitability, return on equity, and price earnings ratios in international corporations that are publicly traded on exchanges in the United States. The conceptual framework for this study has been developed from Hambrick and Finkelstein (1987), Murphy (1999), and other writers who have built upon Hambrick and Finkelstein's concept of managerial discretion first put forth in 1987.

The study is presented in five chapters. Chapter one provides an introduction with an overview of the background of the problem, the purpose of the study, a statement of the problem, research questions, research hypotheses, and definition of the key terms used throughout the study. Chapter two presents a review of current literature related to research in CEO compensation and organizational outcomes. Chapter three describes the methodology employed in the study as well as the population, research design, research hypotheses, data collection, and data analysis techniques. Chapter four presents the details of the statistical analyses, the demographics of the samples, and the interpretations and findings. Chapter five summarizes the findings, conclusions, and recommendations for future research.

CHAPTER II

LITERATURE REVIEW

Overview

CEO compensation has been studied from many perspectives. Equity theory has considered the desire of CEOs to receive compensation that is perceived as fair (Finkelstein & Hambrick, 1988; Finkelstein & Hambrick, 1996; Gomez-Mejia & Balkin, 1992; Adams, 1963). Expectancy theory has put forward that CEOs expect rewards based on the effort and the performance achieved (Vroom, 1964). Human capital theory has examined the proposition that CEO pay is associated with the profile of the executive (Becker, 1993; Gomez-Mejia & Balkin, 1992; Hogan & McPheters, 1980; Becker, 1975). Agency theory has studied the costs associated with conflicts of interest between principals and agents (Tosi, Katz & Gomez-Mejia, 1997; Tosi, Katz & Gomez-Mejia, 1998; Fama & Jensen, 1983; Fama 1980; Jensen & Meckling, 1976). Labor market theory has examined the relationship between supply and demand in the labor markets and compensation (Fama, 1980; Fama & Jensen, 1983). Discretion theory has looked at the relationship between the relative freedom of action available to CEOs and levels of performance and compensation (Finkelstein & Hambrick, 1990; Hambrick & Abrahamson, 1995; Hambrick and Finkelstein, 1987; Rajagopalan and Datta, 1996; Murphy, 1999; Wright & Kroll, 2002).

The literature developing these theories has related CEO compensation to a host of variables, such as tenure, human capital, shareholder wealth, risk sharing, incentives, organizational size, duality, board of directors control,

agency, internationalization, firm performance, managerial discretion, succession, economics, sales, and industry. To better understand the rationale for the variables proposed to determine CEO compensation, it is helpful to summarize the literature relative to CEO compensation.

F.W. Taussig and W.S. Barker (1925) observed that the organizational structure of American business had changed from personal to institutional. While prior to the early twentieth century businesses had been structured as proprietorships or partnerships, they had grown larger and more complex. Whereas previously the owner(s) had managed businesses, American business by the early twentieth century had become a more impersonal enterprise managed by salaried employees (Taussig & Barker, 1925).

In one of the first systematic studies on CEO compensation, Taussig and Barker reviewed financial data and chief executive compensation from 24 industries for the 10-year periods 1904-1913 and 1905-1914. The results of the study confirmed the theory of profits that wages belong to the employee and profits to the owners of the concern (Taussig & Barker, 1925). The interest stirred by their publication led to more inquiries into the “divergence between ownership and control” and the ways in which it effected American business and management (Berle & Means, 1932, p.228). Authors, such as Baumol (1959), Simon (1959), Cyert & March (1963) and Williamson (1964), developed behavioral and managerial theories related to the employee manager in contrast to the classical entrepreneur or owner model. Alchian and Demsetz (1972) and Jensen and Meckling (1976) viewed the firm as a set of contracts between the

various factors of production. Their perspective was one of the firm holding property rights established by contracts with a team of participants each looking out for their own self-interest.

Other authors, such as Festinger (1957), Zoltnik and Christensen (1958), Patchen (1959), and Adams (1961), followed up on theories of cognitive dissonance and examined compensation effects based on perceptions of “equitable” versus “inequitable” and the resulting consequences. Employees perceive that they contribute an investment of education, intelligence, experience, training, skill, seniority, age, sex, ethnic background, social status, and effort for which a just return is expected (Homans, 1961). This return includes pay and rewards intrinsic to the job, seniority benefits, status, and status symbols (Adams, 1963). Discrepancies between employees’ perceptions of the value of their inputs and their perceptions of the rewards received result in dissonance and its associated costs. The cost of this dissonance could be modifications in the levels of inputs or outputs, change of comparative standard, or leaving the situation (Adams, 1963). Likewise, employers have the expectation of return on their “investment” in the employee. In exchange for their investment of pay, assets, company structure, and company history and name, employees expect a certain level of return from the employee. Discrepancies between expected returns and perceived returns result in dissonance that may result in either modifications in benefits provided to the employee, or termination of the relationship (Adams, 1963).

According to these writers, employees set some comparative standard against which to determine the equity or inequity of the outputs received versus the inputs provided. Determining how employees establish such comparatives remains largely unsolved; no research has dealt with issues related to the change of these factors over time (Atchison, Belcher & Thomsen, 2002).

Numerous writers have found size to be highly correlated to CEO compensation (Baumol, 1959; Fox, 1980). Simon (1957) argued that the relationship between the size of the firm and salaries paid to executives was due to the natural tendency to maintain salary differentials between levels of management. Mahoney (1979) carried this argument forward by calculating pay differentials on different levels of management to determine that a 30% to 40% differential between two levels is normal. Roberts (1959) argued that the proper calculation of marginal revenue produced by an executive would be the revenue earned with the efforts of the executive minus the revenue that would have been earned without the executive's efforts. Therefore, the same efforts with the same level of success carried out in a larger firm would add more marginal revenue simply for reasons of scale. Consequently, executives in larger firms are of higher value to the firm, and it is natural that they are so compensated (Roberts, 1959). The theoretical underpinnings for this view come from neoclassical economics and relate to measures of job complexity, the employer's ability to pay, and the executive's human capital (Agarwal, 1981). Four measures are used to determine job complexity: (1) span of control or the number of persons supervised, (2) functional divisions under the executive's direct responsibility, (3)

management levels or number of management levels under the executive's indirect supervision, and (4) geographic diversity or the number of states or countries in which the executive operates businesses (Roberts, 1959). The ability to pay was also found to be a determinant of executive compensation, according to Roberts (1959), because of the relative shortage of executive talent and the firm's to pay competitive wages in order to attract the best talent. Consequently, the greater the firm's ability to pay, the better the level of executives the firm is able to hire, and the higher the level of executive compensation (Agarwal, 1981). The third determinant of executive compensation, according to Roberts (1959), is human capital. The quantity and quality of human capital were determined by Roberts based on educational level, field of study, and work experience. Roberts found, in his study, that 80% of the variation in executive compensation could be explained collectively by these three independent variables (Roberts, 1959).

In keeping with classical economic and behavioral theory, numerous writers have sought to show profitability to be an important predictor of CEO compensation (Agarwal, 1981; Lewellen & Huntsman, 1970). However, in many cases, the linkage was not strong and supported the idea of CEO compensation being only weakly related to firm performance (Lawler, 1971; Redling, 1981; Rich & Larson, 1984). The dangers of size determining executive compensation, more than performance, were highlighted by McEachern (1975). Mere increases in size may not improve the performance of the firm, even though small improvements in efficiencies may have big consequences in large companies.

Numerous empirical studies have examined the differences in the effects between control exercised in owner-controlled firms versus that exercised in management-controlled firms (Salancik & Pfeffer, 1980). Owner-controlled firms tend to have higher profitability (McEachern, 1975), while management-controlled firms tend to over-report earnings (Saloman & Smith, 1979), are more risk-averse (Palmer, 1973), and are more likely to violate antitrust laws (Blair & Kaserman, 1983).

Recognizing the potential effect of control on compensation, Gomez-Mejia, Tosi, and Hinkin (1987) sought to examine whether control by owner or control by management influences the relationship between compensation and performance or compensation and size. They determined that, when dominant stockholders control a firm (owner controlled), the CEO's pay is significantly influenced by performance. The CEO is paid more for performance than for the scale of the operation. However, when a firm is management controlled, there is some relationship between performance and pay, but it is a much weaker link than in the former case and correspondingly there is a much stronger relationship between CEO compensation and firm size (Gomez-Mejia, Tosi, & Hinkin, 1987).

Equity Theory

In 1963, John Stacy Adams put forth his theory of social inequity. Building upon the earlier works in distributive justice, cognitive dissonance, and behavioral psychology, Adams (1963) pointed out that equity was not merely "a fair day's pay for a fair day's work," but rather more than a simple financial

transaction. According to Adams (1963), there are concepts of justice permeating the relationship of employee and employer that transcend simple economics.

When a CEO, or any other employee, exchanges services for pay, the employee contributes his (her) inputs. Adams (1963) specifically referred to education, intelligence, experience, training, skill, seniority, age, sex, ethnic background, social status, and effort. Conceptually, the input by the employee could be any attribute that the employee considers significant in his (her) contribution to the job. For his (her) contribution, the employee expects a just return.

There may be differences of perception between the employee and employer regarding the recognition or the relevance of the employee's inputs. The employee may perceive attributes that the employer does not perceive and the employee may assign levels of importance to attributes that the employer does not (Adams, 1963). If the employee perceives the contribution of an input, he (she) will expect a return. The level of return expected by the employee will be based upon the relevance that the employee assigns to that attribute.

Conversely, the employer also has expectations of return or inputs to be received from the employee in exchange for given levels of compensation. Monetary and non-monetary rewards given by the employer to the employee in Adams work were referred to as outcomes. Outcomes consisted of pay, special benefits of the job, seniority benefits, fringe benefits, job status, status symbols, and any other benefit the employee might value (Adams, 1963). As with inputs, the recognition and relevance of outputs depend upon the perception of both the

employee and employer. Both employee and employer expect a level of return for their respective contributions.

Inequity is perceived when this expected level of return is not met between inputs and outcomes (Adams, 1963). The determination of inequity is based on one's perceptions. Consequently, it is not objective inputs and outcomes, but perceived inputs and outcomes combined with expectations of return that determine whether inequity exists. These expectations are based on a comparison with perceived inputs and outcomes between other entities that may be people, businesses, or conceptual. The comparative exchange may be in the present, the past, or even in a desired future (Adams, 1963). Consequently, the determination of equity or inequity carries a heavy psychological component and may be significantly influenced by cultural and historical issues. Therefore, in order to estimate the likelihood of perceived inequity, one must first know something of the values and norms of the people and cultures involved.

According to Adams (1963), when inequity, is perceived it creates tension. The amount of tension is determined by the extent of the perceived inequity. The person feeling the tension takes action to reduce the tension by reducing the amount of perceived inequity. In order to accomplish this, the person basically has four alternatives: (1) reduce actual or perceived inputs, (2) increase actual or perceived outcomes, (3) change their comparison standard, or (4) leave the situation (Atchison, Belcher & Thomsen, 2002).

Expectancy Theory

In 1964, Victor Vroom, put forth his expectancy theory. The essence of expectancy theory is that the individual will behave in a particular manner to the extent that he or she believes that such behavior will result in the attainment of some desired outcome, and that the result will lead to another desired outcome (Reinhardt & Wahba, 1975). This is particularly important for CEO's where the complexity of their tasks is such that the potential for success or failure plays a vital role. The theory proposes that there are expectancies that certain outcomes will occur and that there are valences or satisfactions to be derived from those outcomes. Expectancies may be divided into two types: (1) efforts will lead to performance, and (2) performance will lead to reward (Vroom, 1964). In this version of the theory, each expectancy is multiplied by its valence and the products are summed. According to Vroom (1964), the alternative with the highest expected return will be chosen.

In a later version, E. Lawler (1971) incorporated the instrumentality or the probability that performance would indeed lead to reward to add several possible outcomes to the equation. While there is only one possibility for effort, there are various possibilities for outcome.

Expectancy theory is one of the widely researched theories of motivation, and it has been used as a basis for research in a broad range of areas, such as decision making, learning theory, verbal conditioning, achievement motivation, social power, coalition formation, attitudes, and organizational behavior (Reinhardt & Wahba, 1975).

While expectancy theory would seem to be clear guidance to performance motivation in organizations, its application is not without resistance. CEOs may be interested in rewards other than those offered by the organization. There may be a perception that, in order to attain some rewards, other rewards that are important to them must be foregone (for high pay employees must sometimes give up security, free time, or social relations). Some employees may not believe that their efforts will indeed lead to the desired rewards. Employees may be unsure that their efforts will result in the required performance and consequently diminish the likelihood of the rewards. There are many factors that are beyond the employees' control (Atchison, Belcher, & Thomsen, 2002).

The successful application of expectancy theory and obtaining performance motivation is highly dependent on the employee group, the corporate culture, the organization's technology, and the values held by the employees. Some employees may not be interested in the rewards offered by the company, and may want rewards that the company would not be willing to give (Atchison, Belcher, & Thomsen, 2002).

Human Capital Theory

Human capital has been defined in various ways; Martin Husz (1998) defined it as "the time, experience, knowledge and abilities of a household or a generation, which can be used in the production process." (Husz 1998, p.9). Schultz (1992) defined human capital investments as the cost of enrollments times the rates of enrollments. Gary Becker (1993) refers to the investment in human capital as the "expenditures on education, training, and medical care that produce

human not physical or financial capital, because you cannot separate a person from his or her knowledge, skills, health, or values the way it is possible to move financial and physical assets while the owner stays put.” (Becker 1993, p.16).

When the Sveriges Riksbank (Bank of Sweden) announced the Nobel Prize in Economic Sciences in 1992 awarded to Gary Becker, the announcement cited his most noteworthy contributions in the area of human capital. The announcement went on to state that “the theory of human capital has created a uniform and generally applicable analytical framework for studying not only the return on education and on-the-job training, but also wage differentials and wage profiles over time.” (Sveriges Riksbank 1992, p.4).

Becker (1993) noted that there is a difference between specific skills that are uniquely applicable to a specific employer and general skills that are applicable to a broad range of employers. Employers usually benefit from specific skills, which are gained through employer-provided training, over a prolonged period of time, and are dependent on stability in the employment relationship. General skills being applicable in a variety of firms are less likely to lead to stability in the employment relationship. Becker addressed these phenomena separately, and came to two primary conclusions. He concluded that employers generally share the costs and returns of developing firm-specific skills. However, in a competitive labor market, firms will not invest in their employees’ general skills because of their inability to collect on the returns from these skills. Consequently, employees must pay the cost of the development of their general skills (Becker, 1963).

Contrary to Becker's appreciation, Kessler and Lulfesmann (2002) note that there is substantial evidence that firms often bear the cost of training, even for skills that are of a general nature. According to Kessler and Lulfesmann (2002), investments in general and specific skills cannot be analyzed separately. Rather, they posited that relationship-specific rents generated through firm-specific training makes the returns from either type of investment interdependent. Consequently, their approach specified that, if a firm could only provide general training, it would not do so because of its subsequent inability to obtain returns from this training. However, if the firms could provide relationship specific training as well as general training, the general training would increase the effectiveness of the relationship specific training, while the relationship specific training would create a productivity wedge between their employee and outside employment opportunities (Kessler & Lulfesmann, 2002). According to Kessler and Lulfesmann (2002), the return for the general training would go entirely to the employee, and the return for the firm-specific training would go to the firm.

Despite the great contributions that human capital theory has provided for economics and sociology in general, the results in CEO compensation have been somewhat less stellar. While numerous authors have examined the influence of human capital in CEO salaries, only the number of years of experience has been shown to be significant. Little to no relationship has been demonstrated with regards to education, training, or other human capital attributes (Agarwal, 1981; Lewellen & Huntsman, 1970).

Perhaps this result should not be surprising when we consider the rather significant minimum threshold that must be crossed before one is likely to be named CEO. It is not as if a study of CEOs is applicable across a broad range of human society. Before one may even be considered a candidate a CEO position, a high level of experience and success is required (Gomez-Mejia & Wiseman, (1997).

Labor Market Theory

The classical economic theory of supply and demand forms the basis for labor market theory (Fama, 1980). However, the implications have evolved as the theory has been applied to research in executive compensation, and, in particular, the selection and compensation of CEOs (Gomez-Mejia & Balkin, 1992). At the heart of the theory is the suggestion that the pool of capable executives, and, in particular, CEOs is limited. Consequently, in order for firms to obtain the best candidates for their organizations, they must pay as well or better than other organizations competing in the same labor market (Fama, 1980). Therefore, the relationship between firm complexity and salary levels should not be surprising. While some have related this positive relationship to the maintenance of hierarchical level pay differentials, others argue that the relationship between size and complexity is related to the size of the entity (Mahoney, 1979; Roberts, 1959). Adding to the support of labor market theory is the classical economic concept of marginal product, which holds that an employee's compensation should be related to that employee's marginal product. As previously mentioned, the firm's size and demographics will influence the potential marginal product of

the CEO and consequently the level of compensation. The larger the scale of operations, the greater the benefit that will be derived from any improvement (Roberts, 1959). Likewise, the concept of marginal utility would provide that the selection of one employee over another or, in our case, one CEO over another should be related to the marginal product likely to be produced by one candidate relative to that of another (Hambrick & Snow, 1989).

Labor market theory is firmly based in classical economic theory and has enjoyed considerable support in the literature. Because of its clear theoretical basis, and the wide-spread knowledge of those bases, its use by boards of directors and executive recruiters as justification for the salaries paid to CEOs has exceeded its support from findings relative to performance (Gomez-Mejia & Wiseman, 1997).

Agency Theory

In the latter part of the 19th Century and the early years of the 20th Century, it became evident that a transformation was taking place in the traditional model of business organizations. Up until that time, businesses had typically been either proprietorships or partnerships. The owners of the business had carried out the management of business enterprises, or at least been very involved in the day-to-day management of the business. However, by the early 20th Century, the shift in business structures had notably moved towards the professional manager. The professional manager was not an owner of the business but, rather, an employee (Taussig & Barker, 1925). Taussig and Barker (1925) go on to cite publications indicating nine tenths of the businesses in the

United States in 1919 were corporations, and that those corporations employed 86.6% of all American workers.

With this change in the organization of American business, interest and studies began to be directed towards this new structure. Studies by Taussig and Barker were some of the first. Their 1925 study reaffirmed the principle of salaries for the employees, and profits for the owners. However, even at this early stage, they discussed the issue of how self-interest might effect decisions or practice when owners are frequently not present in a meaningful way in the ongoing operations of the firm (Taussig & Barker, 1925). Following this 1925 study of Taussig and Barker, many writers carried on the discussion of property rights. These authors dealt with a broad range of issues, including how costs and rewards would be distributed amongst the various participants in organizations (Jensen & Meckling, 1976). As implied by its name, this line of study viewed the interaction amongst the players within the context of rights and obligations. Consequently, a contractual perspective was generally used focusing on both the implied and explicit contracts among the owners and the managers of firms (Jensen & Meckling, 1976). In addition to the property rights view, a perspective of agency also evolved. This view became know as agency theory and, according to Jensen and Meckling (1976), despite dealing with similar problems, evolved independently of the property rights view.

The definition of an agency relationship used by Jensen and Meckling (1976) was that of a principal engaging an agent to perform some service on behalf of the principal in which the principal would delegate some decision-

making authority to the agent. According to Jensen and Meckling, “if both parties to the relationship are utility maximizers, there is good reason to believe that the agent will not always act in the best interest of the principal. The principal can limit divergences from his interest by establishing appropriate incentives for the agent and incurring monitoring costs designed to limit the aberrant activities of the agent (Jensen & Meckling, 1976, p. 308).

However, both the contractual arrangements to reduce agent’s divergences from the principal’s interests and monitoring in order to control or prevent agent’s divergence have their costs. It is not possible for principals to control the agent’s divergence without incurring agency costs. According to Jensen and Meckling (1976), these costs are composed of monitoring expenditures by the principals, bonding expenditures by the principals, and the residual losses.

Monitoring expenses include both cash and non-cash expenditures. All efforts exerted by the principals or their agents in order to ensure that the efforts of their agents are directed toward the maximization of the principal’s interests are monitoring costs. These may be the cost of auditors, of an internal control structure, or the supervisory efforts of the principals themselves. Whatever resources are dedicated to ensuring that the efforts of the agents are well directed represents a monitoring cost.

Bonding expenses are incurred to guarantee that the agent will not take certain actions that would be contrary to the principal’s best interest, or ensure that if such adverse actions were taken, the principal would be compensated.

Generally, Jensen and Meckling (1976) found it impossible to eliminate the negative results of the agency problem completely.

The losses incurred by the principal because of agency divergence despite all efforts to avoid them are referred to as residual costs. They are the dollar equivalents of the reduction in welfare that the principals incur because of the divergence between the agent's decisions and the decisions that would maximize the principal's welfare (Jensen & Meckling, 1976).

Fama (1980) recognized the importance of Jensen and Meckling's view of the firm as a set of contractual relations; however, he felt it did not go far enough towards explaining the modern corporation. Fama (1980) sought to lay to rest the classical vision of the owner entrepreneur as no longer valid within the context of 20th Century business organizations. He viewed risk bearing and management as natural and separate factors within the set of contracts that make up a firm, and felt that the firm was disciplined by competition from other firms. In Fama's view, the traditional concept of an owner was not longer valid. He viewed the modern corporation as a nexus of contracts disciplined by competition from fellow participants within the corporation and other firms outside the corporation. In Fama's view, this competition would force the organization to develop efficient and effective methods for monitoring the performance of the entire team (Fama, 1980). According to Fama (1980), this monitoring of performance within the firm goes from top to bottom, but also from bottom to top as lower level managers step over shirking bosses to advance themselves and also to ensure that their marginal product is as great as possible.

In Fama's (1980) view, it was not reasonable in the modern world to think that shareholders, who typically have their investments spread across many firms, are able or interested in exercising control over the employee managers of a firm. He believed that the ultimate control over the senior executives of a corporation came from its outside competitors or corporate raiders in the form of a takeover.

Fama and Jensen (1983) further advanced this view of the modern firm. They felt that "the contract structure combined with available production technologies and external legal constraints to determine the cost function for delivering an output with a particular form of organization. The form of organization that delivers the output demanded by customers at the lowest price, while covering costs, survives" (Fama & Jensen, 1983, p.302). According to Fama and Jensen (1983), the central contracts to any organization are those that establish the nature of residual claims, and those that establish the allocation of the steps of the decision process among agents.

Those having contractual rights to the residual cash flow are considered the residual risk bearers, and considered to have the highest level of uncertainty with regards to payoffs. Other agents have contractual rights to either fixed promised payoffs or incentive payoffs tied to specific measures of performance (Fama & Jensen, 1983).

Discretion Theory

While empirical evidence of association between changes in performance and compensation has been weak, strong association has been established between executive compensation and firm size (Barkema & Gomez-Mejia, 1998;

Finkelstein & Hambrick, 1996; Gomez-Mejia & Balkin, 1992, and Tosi et al., 1998).

Consequently, some researchers have espoused the view that top leaders of organizations have relatively little impact on their organizations due to the external environments within which the organizations operate, or the effects of inertia within their organizations (Liebersohn & O'Connor, 1972; Salancik & Pfeffer, 1977). Other theorists have put forward work suggesting that strategic choices and organizational performance are very much impacted by the views of top leaders within the organization (Kotter, 1982; Hambrick & Mason, 1984; Kets de Vries & Miller, 1986). However, the results of research have been mixed (Finkelstein & Hambrick, 1990; Wright & Kroll, 2002).

In 1987, Hambrick & Finkelstein created a theoretical bridge between these positions with their concept of “discretion” to explain the differing levels of executive influence resulting from variant levels of constraint or freedom faced by different top management teams (Finkelstein & Hambrick, 1990). According to Hambrick and Finkelstein (1990), discretion is the level of freedom or constraint faced by management. Those managers with greater freedom to implement decisions with relatively fewer constraints can significantly shape their organization, while those with greater constraints and less freedom will be less able to do so (Finkelstein & Hambrick, 1990).

In 1990, Finkelstein and Hambrick furthered their understanding of the impact of discretion by testing levels of strategic persistence and conformity to industry averages in relation to top managerial team tenure, and further tested the

association with regard to discretion. Using primary indicators such as product differentiability, growth, degree of demand instability, degree of capital intensity, and degree of regulation, managerial discretion was distinguished as high, medium, or low for the industrial group and also for each company within the industry (Finkelstein & Hambrick, 1990).

Finkelstein and Hambrick found a strong correlation between top team tenure and strategic inertia and conformity to industry averages. However, even more important was the strong moderating effect they found discretion to have. The characteristics of top management teams were found to have a strong impact on those industries and companies with higher discretion. They were found to have less impact on those industries and companies with moderate discretion, and they were found to have little or no impact on those industries and companies with little discretion (Finkelstein & Hambrick, 1990).

With the concept of managerial discretion gaining theoretical importance in various areas of research, such as executive compensation, strategic inertia, succession patterns, and administrative intensity, Hambrick and Abrahamson (1995) recognized the limitations imposed by purely qualitative determinations of discretion. In their 1995 article, they sought to gauge the amount of discretion in various industries and provide for more measurable constructs for the determination of environmental discretion (Hambrick & Abrahamson, 1995).

They first reviewed the findings of a panel of academic experts who were familiar with the concept of discretion. These findings were then compared with the opinions of a panel of security analysts from the industries under study.

Hambrick and Abrahamson (1995) then related their seven factors for discretion to the opinions of the previous two panels. The high level of consistency amongst the academics, combined with the strong level of agreement from the security analysts and their correlated relationship to the hypothesized factors, provided for empirical and concrete guidance for identifying low, medium, and high discretion industries (Hambrick & Abrahamson, 1995). In our current discussion of effects of variant levels of discretion, it is helpful to understand the influences identified by Hambrick and Abrahamson as effecting the degree of discretion.

Lieberson and O'Connor (1972) established product differentiability to be positively associated with managerial influence over profit margins. Building on this concept, Hambrick and Abrahamson used research and development intensity and industry advertising intensity as indicators of differentiability. Hambrick and Abrahamson found that industries with higher levels of differentiability among products and services provide management with greater managerial discretion (Hambrick & Abrahamson, 1995).

Demand instability or high market growth results in an increase in unprogrammed decision making and competitive variation as well as uncertainty with regards to means-end linkages (Lieberson and O'Connor, 1972). Consequently, these environments are characterized by variability in management's approach to capacity planning, staffing, and pricing (Hambrick & Abrahamson, 1995). Using the standard deviation of annual market growth rates, increased growth rates were found to be positively associated with managerial discretion (Hambrick & Abrahamson, 1995).

Industry structure effects managerial discretion through the rigidity of unofficial norms by which management may have to abide (Hambrick and Finkelstein, 1987). Oligopolistic industries provide the least amount of discretion, while monopolies provide the highest degree of discretion (Hambrick & Abrahamson, 1995).

Quasi-legal constraints result in industries that have less discretion than industries without such constraints (Hambrick & Abrahamson, 1995). These industries include public hospitals, universities, defense contractors, and government agencies.

Capital intensity is a determinant of discretion on both the firm level and the industry level. Capital intensity creates rigidity and represents a commitment to a long-term course of action (Ghemawat, 1991). Consequently, it limits management's potential for action. While this is particularly true on the firm level, ultimately, the intensity of capital utilization is an industry factor (Hay & Morris, 1979). Hambrick and Abrahamson (1995) used net value of plant and equipment divided by the number of employees as a determinant of capital intensity.

Industries with powerful suppliers or buyers, or other powerful outside forces may limit managerial discretion (Porter 1980). Outside forces that limit management's alternative decisions or abilities to implement limit industrial discretion (Hambrick & Abrahamson, 1995).

Recognizing that "industry conditions have been widely acknowledged as key influences on managerial actions" and seeking to build upon the literature

exploring the role of the environment, Rajagopalan and Datta (1996) carried out an examination into the relationship between industry characteristics and CEO characteristics (p.197). This study related industry conditions, such as industry concentration, capital intensity, differentiation, rapid growth, and demand instability, to CEO characteristics, such as tenure, educational level, functional orientation, functional heterogeneity, and firm performance (Rajagopalan and Datta, 1996).

While the results of the study by Rajagopalan and Data (1996) show that industry factors may be less predictive than firm-specific factors in explaining variations in CEO characteristics; their study focuses exclusively on single business, large firms. Rajagopalan and Datta recognize this limitation as significant since, “Hambrick and Finkelstein argued, firm size is a key determinant of the extent of managerial discretion and hence, the relationships between CEO characteristics and industry conditions are likely to vary across firms of different sizes” (Rajagopalan and Datta, 1996,p.201).

Murphy (1999) furthered the study of the influence of discretion on CEO compensation by relating CEO compensation to corporate profitability and shareholder return in low, medium, and high discretion industries. The results generally support Hambrick and Abrahamson’s previous research (Murphy, 1999). However, there is the somewhat surprising outcome that companies from medium discretion industries pay their CEOs somewhat better than companies from high discretion industries despite higher profitability and return to shareholders in the latter group (Murphy, 1999).

Wright and Kroll (2002) continued research into executive discretion and performance relating CEO compensation, level of discretion, and external monitoring. Their results support prevailing literature in Discretion Theory in those entities with active external monitoring. However, their results are less clear in entities with little external monitoring (Wright & Kroll, 2002). They conclude; “With vigilant monitoring, discretion and performance may directly impact CEO compensation” (Wright & Kroll, 2002, p.213). However, they alternately conclude; “Where monitoring is passive, neither discretion nor performance may affect compensation” (Wright & Kroll, 2002, p.213).

Table 1
Ratings of Managerial Discretion in 71 Industries

Industry Name	SIC	Discretion Score
Computer & Software Wholesaling	5045	6.89
Computer Communication Equipment	3576	6.72
Electronic Apparatus	3845	6.72
Computer Storage Devices	3572	6.62
“Perfume, Cosmetic, Toilet Preps”	2844	6.60
“Catalog, Mail-Order Houses”	5961	6.44
Medical Labs	8071	6.43
Computer Programming	7372	6.38
“In Vitro, In Vivo Diagnostics”	2835	6.36
Help Supply Services	7363	6.16
Motion Picture Production	7313	6.08
Photographic Equipment & Supplies	3861	5.99
Computer Equipment	3570	5.77
Telephone & Telegraph Apparatus	3661	5.70
Variety Stores	5331	5.66
Engineering/Scientific Instruments	3826	5.63
Games & Toys	3944	5.55
Computer Integrated System Design	7373	5.55
Pharmaceuticals	2834	5.54
Surgical/Medical Instruments	3841	5.42
“Women’s, Misses, Junior’s Outerwear”	2330	5.32
Eating Places	5812	5.22
Misc. Amusement & Recreational Services	7990	5.21
Industrial Measurement Instruments	3823	5.19
Motor Vehicles & Car Bodies	3711	5.18
Radio/TV Communication Equipment	3663	5.17
Real Estate Investment Trusts	6798	5.15
“Orthopedic, Prosthetic, Surgical Apparatus”	3842	5.07
State Commercial Banks	6022	5.06
Newspaper Publishing	2711	5.06
Personal Credit Institutions	6141	5.04
Chemicals & Allied Products	2800	5.02
Book Publishing	2731	4.92
Search & Navigation Systems	3812	4.91
National Commercial Banks	6021	4.87
Family Clothing Stores	6551	4.79
Drug & Proprietary Stores	5912	4.78
Women’s Clothing Stores	5621	4.75
Department Stores	5311	4.75

Table 1, continued
 Ratings of Managerial Discretion in 71 Industries

Industry Name	SIC	Discretion Score
"Electric Lighting, Wiring Equipment"	3640	4.73
Television Broadcast Stations	4833	4.72
"Men's, Youth, Boy's Furnishings"	2320	4.72
Groceries & Related Products - Wholesale	5140	4.71
"Converted Paper, Paperboard"	2670	4.68
"Hotels, Motels, Tourist Courts"	7011	4.67
Hazardous Waste Management	4955	4.65
Semiconductors	3674	4.61
"Insurance Agents, Brokers, & Services"	6411	4.54
Paper Mills	2621	4.46
Engineering Services	8711	4.46
Water Transportation	4400	4.34
Instruments to Measure Electricity	3825	4.33
Grocery Stores	5411	4.32
Federal Savings Institutions	6035	4.32
Security Brokers	6211	4.27
Natural Gas Distribution	4924	4.05
Commercial Printing	2750	4.03
Motor Vehicle Parts & Accessories	3714	3.92
"Air Conditioning, Heating, Refrigeration Equipment"	3585	3.80
Phone Communication	4813	3.72
"Railroads, Line-Haul Operations"	4011	3.51
Drilling Oil and Gas Wells	1381	3.41
Certified Air Transportation	4512	3.23
Petroleum Refining	2911	3.07
Water Supply	4941	3.04
Trucking	4213	2.72
Gold & Silver Ores	1040	2.42
Petroleum /Natural Gas Production	1311	2.33
Electric Services	4911	2.25
Blast Furnaces/Steel Mills	3312	2.08
Natural Gas Transmission	4922	2.01

(Hambrick & Abrahamson 1995)

Table 2
CEO Compensation Factors

FACTORS	STUDIES
Agency Theory	Bertrand & Mullainathan (2000), Elston & Goldberg (2001), Bebchuk & Fried (2003), Wright & Kroll (2002), Tosi, Katz & Mejia (1997), Banning & Tosi (1999), Banning & Tosi (1997), Tosi, Katz & Mejia (1997), Goldberg & Idson (1995), Roth & O'Donnell (1996), Parks & Cohnlon (1995), Eisenhardt (1988), Garen (1994), Jones & Butler (1992), Eisenhardt (1989), Tosi & Mejia (1989)
Board of Director Control	Daily, Johnson, Ellstrand & Dalton (1998), Bebchuk, Fried & Walker (2002), Denis & McConnell (2003), Hallock (2002), Anderson & Bizjak (2001), Dykes (2003), Westphal (1997), Barkema (1996), Lorsch (1995), Westphal & Zajac (1995), Boyd (1993), Baysinger & Hoskesson (1990), Hermalin & Weisbach (1988), Pfeffer (1972)
CEO Duality	Boyd (1994), Balkin & Mejia (1987), Hunt (1986), Daily & Dalton (1997), Daily & Schewenk (1996), Zajac & Westphal (1996), Werner & Tosi (1995), Hambrick & Finkelstein (1995), Finkelstein & D'Aveni (1994), Dobrzynski (1991), Jensen (1983), Fama & Jensen (1983), Salancik & Pfeffer (1980)
CEO Succession	Dalton & Kesner (1985), Zajac (1990)
Economics	Hannafey (2003), Murphy (2002), Fosberg & James (1995), Masson (1971), Lewellen (1975), Dunlevy (1985), Kerr & Kren (1992)
Environment	Boyd, Dess & Rechner (1993), Snow & Thomas (1994), Kerr (1985), Westphal & Zajac (1994), Jensen (1993), Hanbrick & D'Aveni (1992), Hambrick & Schectger (1983), Rajagopalan & Prescott (1990), Roth (1995), Bartlett & Ghosal (1994)

Table 2, continued
CEO Compensation Factors

FACTORS	STUDIES
Firm Performance	Mehdian & Vogel (2003), Young & Buchholtz (2002), Boschen, Duru, Gordon & Smith (2002), Garvey & Milbourn (2003), Eldenburg & Krishnan (2003), Core, Guay & Verrecchia (2003), Sigler (2003), Gregoriou & Rouah (2002), Prakash, Sethi & Namiki (1986), Murphy (1985), Antle & Smith (1986), Gomez-Mejia, Tosi, Hinkon (1987), Chaubey & Kulkarni (1988), Leonard (1990), Abowd (1990), Dillard & Fisher (1990), Hotchkiss (1990), Aupperle, Figler & Lutz (1991), Bromiley (1991), Gomez-Mejia (1992), Rhoades, Rechner & Sundaramurthy (1998), Moskowitz (1998), MacGuire & Dow (1998), Tosi & Gomez-Mejia (1994), Hill & Stevens (1995), Leonard (1994), Veliyath (1995), Rajagopalan (1996), Prasad (1974), Redling (1981), Greenberg & Leventhal (1976), Heller (1995), Andrews (1996)
Human Capital	Combs & Skill (2003), Kessler & Lulfesmann (2002), Becker (1993), Rajagopalan, Nandini, Datta & Deepak (1996), Leventhan (1988), Grossman (1983), Barkema (1995), Starks (1987), Jensen & Meckling (1976)
Incentives	Lindrner (1998), Wallace Jr. (1973), Zajac & Westphal (1994), Delacroix & Saudagaran (1991), Lewis (1980), Harris & Raviv (1979), Greenberg & Liebman (1990), Jensen & Murphy (1990), Lewellen, Loderer & Martin (1987), Riordan & Sappington (1987), Winn & Shoenhair (1988), Baker, Jensen & Murphy (1988), Nalebuff & Stiglitz (1983), Weitzman (1980)”
Industries	Hambrick & Abrahamson (1995), Rajagopalan & Datta (1996)
International	Persons (2001), Sanders & Carpenter (1998), Carpenter, Sanders & Gregersen (2001), Lowe, Milliman, Cierri & Dowling (2002), Main (1991), Pennings (1993), Mejia & Palich (1997)
Managerial Discretion	Finkelstein & Boyd (1998), Hambrick & Abrahamson (1995), Salanick & Pfeffer (1977), Finkelstein & Hambrick (1990), Hambrick & Finkelstein (1987), Haleblan & Finkelstein (1993), Tosi & Werner (1995), Carpenter & Golden (1997)
Organization Size	“Lambert, Larcker & Weigelt (1991), Kostiuk (1989)”

Table 2, continued
CEO Compensation Factors

FACTORS	STUDIES
Organization Structure	Lambert, Larcker & Weigelt (1993), Balkin & Gomez-Mejia (1990), Venkatraman & Grant (1996), Hansen & Wernerfelt (1989), Zajac (1988), Pearce, Stevenson & Perry (1985), Eisenhardt (1985), Pfeffer (1981), Gupta (1980), Mahoney (1979), Beyer & Trice (1979), Galbraith (1974)
Political	Malette, Middlemist & Hopkins (1995), Walters, Hardin & Schick (1995), Ingson & Steers (1984), Finkelstein & Hambrick (1989)
Profit	Antgle & Smith (1985), Gomez-Mejia (1994), Gilson & Vetsuypens (1993), Roberts (1959)
Risk Sharing	Bloom & Milkovich (1998), Aggarwal & Samwick (2003), Miller, Wiseman & Gomez-Mejia (2002)Shavell (1979), Beatty & Zajac (1994), Gossman (1995), Gaver & Gaver (1995), Gaver & Gaver (1993), Reinganum (1985), Kerr & Bettis (1987)
Sales	Daily & Dalton (1994), Cox & Shauger (1963)
Shareholder Wealth	Santerre & Neun (1986), Shen & Cannella Jr. (1997), Rumelt (1991), Brickly, Bhagat & Lease (1984)
Tenure	Finkelstein & Hambrick (1990), Hill & Phan (1991), Weisbach (1987), Kesner (1988), Hambrick & Baumrin (1988), Coughlin & Schmidt (1985), Barro & Barro (1990), Fazel & Louie (1990)
Tournament Theory	Main & Crystal (1988), Rajagopalan & Finkelstein (1992), Singh & Harianto (1989)

(Murphy 1999)

CHAPTER III

METHODOLOGY

The purpose of this study is to examine the relationship of CEO compensation, shareholder return, corporate profitability, return on equity, and price/earnings ratios between international companies with high, medium and low managerial discretion. The conceptual framework for this study has been derived from Hambrick and Finkelstein's concept of managerial discretion (1987) and further research by Murphy (1999). The data used in this study were compiled by Standard & Poor's COMPUSTAT division of McGraw-Hill companies and the EDGAR database of the Securities and Exchange Commission. This chapter describes the sampling design, research hypotheses, data collection and data analysis.

Design of the Sample

Using the managerial discretion rankings established by Hambrick and Abrahamson (1995), the investigator will select the SIC codes with the highest levels of managerial discretion, those in the median of managerial discretion, and those with the lowest level of managerial discretion. The investigator will then search the Securities and Exchange Commission's EDGAR database for all companies classified by the Securities and Exchange Commission as publicly traded in the United States and pertaining to those SIC codes. These companies will then be considered to have "high", "medium", or "low" managerial discretion based on Hambrick and Abrahamson's ratings of managerial discretion. The 10K filings for each company of these groups will then be examined to determine which derived 40% or more of their revenues from sales outside of the United

States of America. Those companies with at least 40% of revenues derived from sales outside the United States will be considered to be international companies. A stratified random sample of at least 40 companies will then be taken from the international companies for each grouping of high, medium, and low managerial discretion.

Data from the Securities and Exchange Commission's EDGAR database and the Standard and Poors' COMPUSTAT database will be examined for the years 2002 and 2003 for each of the companies in the samples. This study will specifically look at the salary plus bonus of the chief executive officer, the corporation's return on average equity, return on assets, average price to earnings, and shareholder return.

Research Questions

This study will investigate the following research questions:

1. Is there a significant difference in the average two-year CEO compensation across the three levels of management discretion for international corporations publicly traded in the United States?
2. Is there a significant difference in the two-year average shareholder return across the three levels of management discretion for international corporations publicly traded in the United States?
3. Is there a significant difference in the two-year average return on equity across the three levels of management discretion for international corporations publicly traded in the United States?
4. Is there a significant difference in the two-year average net operating profit rate of return across the three levels of management discretion for international corporations publicly traded in the United States?

5. Is there a significant difference in the two-year average price/earnings ratio across the three levels of management discretion for international corporations publicly traded in the United States?

Research Hypotheses

The hypotheses for this research study were primarily derived from the work of Hambrick and Finkelstein (1987), Finkelstein and Boyd (1998), and Murphy (1999). The null and alternative hypotheses are:

Hypothesis HO1 (null):

There is no significant difference in the two-year average CEO compensation across the three levels of management discretion.

Hypothesis HA1 (alternate):

There is a significant difference in the two-year average CEO compensation across the three levels of management discretion.

Hypothesis HO2 (null):

There is no significant difference in the two-year average shareholder return across the three levels of management discretion.

Hypothesis HA2 (alternate):

There is a significant difference in the two-year average shareholder return across the three levels of management discretion.

Hypothesis HO3 (null):

There is no significant difference in the corporation's two-year average return on equity across the three levels of management discretion.

Hypothesis HA3 (alternate):

There is a significant difference in the corporation's two-year average return on equity across the three levels of management discretion.

Hypothesis HO4 (null):

There is no significant difference in the corporation's two-year average net operating profit rate of return across the three levels of management discretion.

Hypothesis HA4 (alternate):

There is a significant difference in the corporation's two-year average net operating profit rate of return across the three levels of management discretion.

Hypothesis HO5 (null):

There is no significant difference in the corporation's two-year average price / earnings ratio across the three levels of management discretion.

Hypothesis HA5 (alternate):

There is a significant difference in the corporation's two-year average price / earnings ratio across the three levels of management discretion.

Instrument

The data for this study will be obtained from the EDGAR database compiled by the Securities and Exchange Commission and Standard and Poors' database compiled from corporate annual reports and 10K reports filed with the Securities and Exchange Commission.

Construct Validity and Reliability

The validity of determining and using three levels of managerial discretion was first tested by Hambrick and Finkelstein (1987) and found to have high predictive value (Shrout and Fleiss, 1979). However, their original constructs were limited to the use of only clear and unambiguous industries due to their qualitative nature. Hambrick and Abrahamson (1995) solved this limitation by developing quantitative classifications of 71 industries. Hambrick and Abrahamson (1995) compared their quantitatively determined measures of discretion against the opinions of panels of academics and panels of securities analysts. Through this process, they found an intra-class correlation coefficient of the industry mean of .95 while findings as low as .70 would have been considered to be sufficiently significant (Hambrick and Abrahamson, 1995). Consequently, Hambrick and Abrahamson (1995) concluded that a "significant level of predictive validity" existed with the academic panel and "further reassurance of convergent validity" was provided by the consistency between the securities analyst panel and that of the academics. In review of these findings, Murphy (1999) concluded that Hambrick and Abrahamson, 1995 "meet the requirements for construct validity."

Research Variables

Independent Variable

The level of managerial discretion as determined by Hambrick and Abrahamson (1995) will serve as the independent variable for this study. Based on the industry classifications of Hambrick and Abrahamson (1995), companies will be segmented into high discretion companies, medium discretion companies, and low discretion companies for the purposes of this study.

Dependent Variables

Five dependent variables will be used in this study. They are: (1) chief executive officer salary plus bonus, (2) return on equity, (3) return on assets, (4) price to earnings ratio, and (5) shareholder return.

The chief executive officer will be determined to be the person named in the corporations' SEC filings as holding the position in 2002 and 2003. Those companies that changed CEOs during 2002 or 2003 will not be included in the sample. This measure of CEO compensation will be determined based on the corporations' filings with the Securities and Exchange Commission.

Return on equity will provide a measure of corporate profitability performance. Return on equity is defined as income before extraordinary items and discontinued operations less preferred dividend requirements, but before adding savings due to common stock equivalents, divided by reported common equity. This measure will be taken from data compiled by Standard and Poors' COMPUSTAT and examined for the years 2002 and 2003.

Return on assets will provide another measure of corporate profitability. Return on assets is income before extraordinary items divided by total assets. This measure will be taken from data compiled by Standard and Poors' COMPUSTAT and examined for the years 2002 and 2003.

The price to earnings ratio of the corporation relates the market valuation of the shares of the company to the profitability of the company and provides insight into the financial market's view of the firm's earnings. The price to earnings ratio is the closing price divided by the 12-months earnings per share. This measure will be taken from data compiled by Standard and Poors' COMPUSTAT and examined for the years 2002 and 2003.

The final dependent variable is shareholder return. Shareholder return provides a total return to shareholder by providing an annualized rate of return reflecting price appreciation plus reinvestment of dividends and the compounding effect of dividends paid on reinvested dividends. This measure will be taken from data compiled by Standard and Poors' COMPUSTAT and examined for the years 2002 and 2003.

Data Collection

The primary sources for data will be the EDGAR database of the Securities and Exchange Commission and the COMPUSTAT database for 2002 and 2003. A calculated two year average will be used for all dependent variables as measures of corporate characteristics. While the databases used should be complete for publicly traded firms, any firms with missing data will be removed from the population.

Data Analysis

The data for this study will be analyzed using SPSS 13.0 for Windows. Each hypothesis will be tested using the Kruskal-Wallis Test.

Summary

This chapter has described the methodology for the proposed study of the relationship of CEO compensation, shareholder return, corporate profitability, return on equity, and price to earnings ratios between companies with high, medium, and low managerial discretion as conceptualized by Hambrick and Abrahamson (1987), and Murphy (1999). The chapter has provided a description of the population, the sampling design, the research hypothesis, the methods of data collection, and the manner in which the data are to be analyzed. Chapter Four will present the statistical analysis and research results of the study.

CHAPTER IV

ANALYSIS AND PRESENTATION OF FINDINGS

The purpose of this study is to examine the relationship of CEO compensation, shareholder return, corporate profitability, return on equity, and price/earnings ratios between international companies with high, medium and low managerial discretion. The conceptual framework for this study has been derived from Hambrick and Finkelstein's concept of managerial discretion (1987) and further research by Murphy (1999). The data used in this study were compiled by Standard & Poor's COMPUSTAT division of McGraw-Hill companies and the EDGAR database of the Securities and Exchange Commission. This chapter describes the analysis and results of the Kruskal-Wallis non-parametric test of hypotheses.

Results

Test of Hypothesis One

Hypothesis HO1 states that there is no significant difference in the two-year average CEO compensation across the three levels of management discretion. Table 3 summarized the results of the Kruskal-Wallis non-parametric test for K independent samples.

TABLE 3
Kruskal-Wallis Test (Hypothesis One)

		Ranks	
	DISCRETIONARY LEVEL	N	Mean Rank
AVG CEO COMP 2002-03	LOW	40	69.60
	MEDIUM	45	64.53
	HIGH	47	65.74
	Total	132	

Test Statistics^{a,b}

	AVG CEO COMP 2002-03
Chi-Square	.400
df	2
Asymp. Sig.	.819

a. Kruskal Wallis Test

b. Grouping Variable: DISCRETIONARY LEVEL

The Kruskal-Wallis test was applied to 40 companies from low discretion industries, 45 companies from medium discretion industries, and 47 companies from high discretion industries. The resulting p-value was .819, well above the significance level established at .05. Consequently, the null hypothesis cannot be rejected. Therefore, it can be concluded that there is no significant difference in the two-year average salary plus bonus across the three levels of management discretion.

Test of Hypothesis Two

Hypothesis HO2 states that there is no significant difference in the two-year average shareholder return across the three levels of management discretion. Table 4.2 summarizes the results of the Kruskal-Wallis non-parametric test for K independent samples.

TABLE 4
Kruskal-Wallis Test (Hypothesis Two)

		Ranks	
	DISCRETIONARY LEVEL	N	Mean Rank
AVG SHAREHOLER RETURN 2002-03	LOW	40	59.86
	MEDIUM	45	78.39
	HIGH	47	60.77
	Total	132	

Test Statistics^{a,b}

	AVG SHAREHOL ER RETURN 2002-03
Chi-Square	6.608
df	2
Asymp. Sig.	.037

a. Kruskal Wallis Test

b. Grouping Variable: DISCRETIONARY LEVEL

The Kruskal-Wallis test was applied to the same 132 companies divided into their respective classifications of low, medium, and high discretion industries. The resulting p-value of .037 was well below the significance level established at .05. Consequently, the null hypothesis is rejected, and it can be concluded that there is a significant difference in the two-year average shareholder return across the three levels of management discretion. Those companies with a discretionary level in the medium range had significantly higher shareholder return than those with low or high levels of discretion.

Test of Hypothesis Three

Hypothesis HO3 states that there is no significant difference in the corporation's two-year average return on equity across the three levels of management discretion. Table 4.3 summarizes the results of the Kruskal-Wallis non-parametric test for K independent samples.

TABLE 5
Kruskal-Wallis Test (Hypothesis Three)

		Ranks	
		DISCRETIONARY LEVEL	
AVG ROE 2002-2003		N	Mean Rank
	LOW	40	67.94
	MEDIUM	45	68.30
	HIGH	47	63.55
	Total	132	

Test Statistics^{a,b}

	AVG ROE 2002-2003
Chi-Square	.435
df	2
Asymp. Sig.	.804

a. Kruskal Wallis Test

b. Grouping Variable: DISCRETIONARY LEVEL

As with the previous hypotheses, the Kruskal-Wallis test was applied to the same 132 companies divided into their respective classifications of low, medium, and high discretion industries. The resulting p-value of .804 was well above the significance level established at .05. Consequently, the null hypothesis cannot be rejected, and it can be concluded that there is no significant difference in the two-year average return on equity across the three levels of management discretion.

Test of Hypothesis Four

Hypothesis HO4 states that there is no significant difference in the corporation's two-year average net operating profit rate of return across the three levels of management discretion. Table 4.4 summarizes the results of the Kruskal-Wallis non-parametric test for K independent samples.

TABLE 6
Kruskal-Wallis Test (Hypothesis Four)

Ranks		
DISCRETIONARY LEVEL	N	Mean Rank
AVG ROA 2002-03 LOW	40	66.74
MEDIUM	45	68.50
HIGH	47	64.38
Total	132	

Test Statistics^{a,b}

	AVG ROA 2002-03
Chi-Square	.269
df	2
Asymp. Sig.	.874

a. Kruskal Wallis Test

b. Grouping Variable: DISCRETIONARY LEVEL

As with the previous hypotheses, the Kruskal-Wallis test was applied to the same 132 companies divided into their respective classifications of low, medium, and high discretion industries. The resulting p-value of .874 was well above the significance level established at .05. Consequently, the null hypothesis cannot be rejected, and it can be concluded that there is no significant difference in the two-year average return on assets across the three levels of management discretion.

Test of Hypothesis Five

Hypothesis HO5 states that there is no significant difference in the corporation's two-year average price / earnings ratio across the three levels of management discretion. Table 4.5 summarizes the results of the Kruskal-Wallis non-parametric test for K independent samples.

TABLE 7
Kruskal-Wallis Test (Hypothesis Five)

		Ranks		
		DISCRETIONARY LEVEL	N	Mean Rank
AVG PE RATIO 2002-03	LOW		40	52.56
	MEDIUM		45	72.66
	HIGH		47	72.47
	Total		132	

Test Statistics^{a,b}

	AVG PE RATIO 2002-03
Chi-Square	7.621
df	2
Asymp. Sig.	.022

a. Kruskal Wallis Test

b. Grouping Variable: DISCRETIONARY LEVEL

As with the previous hypotheses, the Kruskal-Wallis test was applied to the same 132 companies divided into their respective classifications of low, medium, and high discretion industries. The resulting p-value of .022 was well below the significance level established at .05. Consequently, the null hypothesis is rejected, and it can be concluded that there is a significant difference in the two-year average P/E ratios across the three levels of management discretion. Those companies, with a discretionary level in the low range, had significantly lower P/E ratios than those with medium or high levels of discretion.

CHAPTER V

SUMMARY AND CONCLUSIONS

Chapter five reports the findings and conclusions of this study. The research questions investigated were: (1) Is there a significant difference in the average two-year CEO compensation across the three levels of management discretion for international corporations publicly traded in the United States? (2) Is there a significant difference in the two-year average shareholder return across the three levels of management discretion for international corporations publicly traded in the United States? (3) Is there a significant difference in the two-year average return on equity across the three levels of management discretion for international corporations publicly traded in the United States? (4) Is there a significant difference in the two-year average net operating profit rate of return across the three levels of management discretion for international corporations publicly traded in the United States? (5) Is there a significant difference in the two-year average price/earnings ratio across the three levels of management discretion for international corporations publicly traded in the United States?

Design

Using the managerial discretion rankings established by Hambrick and Abrahamson (1995), the investigator selected the SIC codes with the highest levels of managerial discretion, those in the median of managerial discretion, and those with the lowest levels of managerial discretion. The investigator then searched the Securities and Exchange Commission's EDGAR database for all companies classified by the Securities and Exchange Commission as publicly traded in the United States and pertaining to those

SIC codes. These companies were considered to have “high”, “medium”, or “low” managerial discretion based on Hambrick and Abrahamson’s ratings of managerial discretion. The 10K filings for each company of these groups were then examined to determine which derived 40% or more of their revenues from sales outside of the United States of America. Those companies with at least 40% of revenues derived from sales outside the United States were considered to be international companies. A stratified random sample of at least 40 companies was then taken from the international companies for each grouping of high, medium, and low managerial discretion.

Data from the Securities and Exchange Commission’s EDGAR database and the Standard and Poors’ COMPUSTAT database were examined for the years 2002 and 2003 for each of the companies in the samples. This study specifically looked at the salary plus bonus of the chief executive officer, the corporation’s return on average equity, return on assets, average price to earnings, and shareholder return.

The research questions were operationalized through the following hypotheses:

Hypothesis HO1:

There is no significant difference in the two-year average CEO compensation across the three levels of management discretion.

Hypothesis HO2:

There is no significant difference in the two-year average shareholder return across the three levels of management discretion.

Hypothesis HO3:

There is no significant difference in the corporation's two-year average return on equity across the three levels of management discretion.

Hypothesis HO4:

There is no significant difference in the corporation's two-year average net operating profit rate of return across the three levels of management discretion.

Hypothesis HO5:

There is no significant difference in the corporation's two-year average price / earnings ratio across the three levels of management discretion.

Conclusions

The first hypothesis (H01) could not be rejected (p-value .819). Consequently, there appeared to be no significant difference between the average CEO compensations across the three levels of managerial discretion. This result was contrary to that reached by Hambrick and Abrahamson (1985) and Murphy (1999). However, in reviewing the sample companies, it was noted that other corporations controlled several of the sample companies. While all were publicly traded corporations with their specified CEO, the question arises as to whether the board structure of these companies was predominately composed of members of the managerial hierarchy of the dominant corporations, or of independent shareholders. Wright & Kroll (2002) found that a firm's degree of external monitoring moderated the effect of managerial discretion on CEO compensation.

Consequently, the degree of independence of the board may well influence the relationship of CEO compensation and discretion.

The second hypothesis (HO2) was rejected (p-value .037). Consequently, there appears to be a significant difference in the shareholder return across the three levels of managerial discretion. This finding supports the findings of previous research by Hambrick and Abrahamson (1985) and Murphy (1999). Similar to the results of Murphy

(1999), the highest shareholder return was in the medium discretion group followed by the high discretion group and then the low discretion group. While the relationship between total shareholder return and management discretion has been shown in numerous studies (Persons, 2001), the higher return for medium discretion companies over high discretion companies was initially surprising. However, a review of the raw data reveals descending levels of technology, and other highly differentiable industries as you move from high discretion to medium discretion to low discretion samples. Since total shareholder return is sensitive to investor expectations (Copeland, Koller & Murrin, 2000), the finding of significant differences in shareholder return without significant differences in CEO compensation is consistent with valuation theory and the prevailing investor views of technology stocks in the time period under study.

The third and fourth hypotheses (HO3 & H04) could not be rejected (p-values of .804 and .874 respectively). Consequently, there did not appear to be a significant difference in return on equity or net operating profit rate of return across the three levels of managerial discretion. While this finding varies from the findings of Hambrick and Abrahamson (1985) and Murphy (1999), it also may be influenced by the degree and nature of external monitoring and board independence as found in the research of Wright & Kroll (2002).

The fifth hypothesis (HO5) was rejected (p-value .022). Consequently, there appears to be a significant difference in the two-year average P/E ratios across the three levels of management discretion. This finding is highly consistent with the difference encountered in total shareholder return. As mentioned above, the raw data reveal descending levels of technology, and other highly differentiable industries as you move

from high discretion to medium discretion to low discretion samples. Since total shareholder return and price to earnings ratios are more sensitive to investor expectations than to current operational performance, the finding of significant differences in these areas without significant differences in CEO compensation and current operating performance may be explained through valuation theory (Copeland, Koller & Murrin, 2000).

The results of this study support the influence of discretion theory on shareholder wealth, and point to the potential influence of discretion theory in corporate performance and compensation. Shareholder expectations reflect the market's assessment of future earnings which is affected by firm performance, and in turn effect CEO compensation (Mehdian & Vogel, 2003; Garvey & Milbourn, 2003).

This study is limited in its scope and has contributed to the literature in discretion theory and executive compensation through the examination of the relationship of high, medium, and low discretion industries and CEO compensation and corporate performance. It opens new areas of investigation for future researchers to better understand the impact of CEO compensation, shareholder wealth, and corporate profitability.

Suggestions for Future Research

This study has contributed to the literature on discretion theory and executive compensation; however, it has a number of important limitations. This study used only salary plus bonus as an evaluation of CEO compensation. While salary plus bonus is an acceptable evaluation of CEO's total compensation (Agarwal, 1981), a more comprehensive view of compensation might include: profit-sharing, stock options,

pension benefits, and differential pay (Murphy, 1999). This approach might provide additional insight into how different compensation structures impact shareholder wealth and firm performance.

This study has evaluated firms that are publicly traded in the United States that derive at least 40% of their revenues outside of the United States. While these firms are international in terms of operations and reach, they are, for the most part, of United States origin. The evaluation of firms of origin outside of the United States would be of interest. Philosophies and approaches to executive compensation, and their impact on discretion theory may differ by country and culture.

As with the studies of Wright and Kroll (2002), the potential influence of independence or the lack of independence of the board was present. Research into the effects of independence or lack of independence on companies in otherwise high discretion industries might shed additional light on the concept of discretion.

This study has contributed to the literature on the role played by discretion in CEO compensation and has indicated new directions for furthering research in this area. It is hoped that future research, in these areas, may increase our understanding of executive compensation and shareholder wealth.

References

- Abowd, J.M. (1990). Does performance based managerial compensation affect corporate performance? *Industrial and Labor Relations Review*; 43:525S-73S.
- Adams, S.J. (1963) Toward an understanding of inequity. *Journal of Abnormal and Social Psychology*. 67:5: 422-436.
- Aggarwal, N.C. (1981). Determinants of executive compensation. *Industrial Relations*. 20: 36-46.
- Aggarwal, R., Samwick, A. (2003). Performance incentives within /firms: The effect of managerial responsibility. *The Journal of Finance*. LVIII:4:1613-1649.
- Alchian, A., Demsetz, H. (1972). Corporate management and property rights. *A.E.R.*: 77-95
- Anderson, R., Bizjak, J. (2003). An empirical examination of the role of the CEO and the compensation committee in structuring executive pay. *Journal of Banking & Finance*. 27:1323-1348.
- Andrews, K. (1996, January/February). Briefings from the editors. *Harvard Business Review*. 121: 8-9.
- Antle, R., Smith, A. (1985). Measuring executive compensation: Methods and an application. *Journal of Accounting Research*; 23:296-325.
- Antle, R., Smith, A. (1986). An empirical investigation of the relative performance evaluation of corporate executives. *Journal of Accounting Research*: 24:1-39.
- Atchison, A.J., Belcher, D.W., Thomsen, D.J. (2002). *Internet Bases Benefits & Compensation Administration*. Boston: ERI Economic Research Institute
- Aupperle, K.E., Figler, R.A., Lutz, R.C. (1991). Do the in search of excellence firms effectively match CEO compensation to corporate performance? *Journal of Managerial Issues*; 3:445-457.
- Banning, K., Tosi, H. (1999). The board and the new chief executive: Some constraints on the agency contract following CEO succession. Unpublished doctoral dissertation/*Boston University*, Boston.
- Balkin, D.B., Gomez-Mejia, L.R. (1987). Toward a contingency theory of compensation strategy. *Strategic Management Journal*; 8:169-182.

- Balkin, D.B., Gomez-Mejia, L.R. (1990). Matching organizational strategies. *Strategic Management Journal*; 11:153-169.
- Barkema, H.G. (1995). Do top managers work harder when they are motivated? *KYLOS*; 48:19-42.
- Barkema, H.G. (1996). The effects of board control and compensation mix on strategic orientation. *Advances in International Comparative Management*; 11:127-141.
- Barkema, H.G., Gomez-Mejia, L.R. (1998). Managerial compensation and firm performance: A general research framework. *The Academy of Management Journal*; 41: 135-145.
- Barkema, H.G., Gomez-Mejia, L.R. (1998). Relationship among risk, incentive pay, and organizational performance. *Academy of Management Journal*. 41:283-297.
- Barro, J.R., Barro, R.J. (1990) Pay, performance, and turnover of bank CEOs. *Journal of Labor Economics*; 8:448-481.
- Bartlett, C.A., Ghosal, S. (1994, November/December). Changing the role of top management beyond strategy to purpose. *Harvard Business Review*: 114:79-80.
- Baumol, W.J. (1959). *Business Behavior, Value and Growth*. New York, MacMillian.
- Beatty, R.P., Zajac, E.J. (1994). Managerial incentives, monitoring, and risk bearing: A study of executive compensation, ownership, and board structure in initial public offerings. *Administrative Science Quarterly*; 39:313-335.
- Bebchuk, L., Fried, J., Walker, D. (2002). Managerial power and rent extraction in design executive compensation. *The University of Chicago Law Review*. 69:751-846.
- Bebchuk, L., Fried, J. (2003). Executive compensation as an agency problem. *Journal of Economic Perspectives*. 17:3:71-92.
- Becker, G.S. (1993). *Human Capital: A theoretical and Empirical Analysis, with Special Reference to Education*. Chicago: University of Chicago Press.
- Berle, A., Means, G. (1932). *The Modern Corporation and Private Property*. New York: MacMillian.
- Bertrand, M., Mullainathan, S. (2000). Agents with and without principals. *The American Economic Review*. 90:2: 203-208.

- Boschen, J., Augustine, D., Gordon, L., Smith, K. (2003). Accounting and stock price performance in dynamic CEO compensation arrangements. *The Accounting Review*. 78:1:143-168.
- Bosworth, W., Mehdiian, S., Vogel, T. (2003). Executive compensation and efficiency: A study of large and medium sized bank holding companies. *American Business Review*. 21:1:91-99.
- Beyer, J.M., Trice, H.M. (1979). A reexamination of the relations between size and various components of organizational complexity. *Administrative Science Quarterly*; 24:48-64.
- Blair, R., Kaserman, L. (1983) Ownership and control in modern organizations: Antitrust implications. *Journal of Business Research*. 11: 333-344.
- Boyd, B.K. (1993). Board control and CEO compensation. *Strategic Management Journal*; 15:335-344.
- Boyd, B.K. (1994). CEO duality and firm performance: A contingency model. *Strategic Management Journal*; 16:301-312
- Boyd, B.K., Dess, G.G., Rechner, P.L. (1993). Divergence between archival and perceptual measures of the environment: Causes and consequences. *Academy of Management Review*; 18:204-226.
- Brickley, J.A., Bhagat, S., Lease, R.C. (1984). The impact of long-range managerial compensation plans on shareholders wealth. *Journal of Accounting and Economics*: 7:115-129.
- Bromiley, P. (1991). Testing a causal model of corporate risk taking and performance. *Academy of Management Journal*; 34:37-59.
- Carpenter, M.A., Golden, B.R. (1997). Perceived managerial discretion: A study of cause and effect. *Strategic Management Journal*; 18:3:187-206.
- Carpenter, M.A., Sanders, W.G. (2001). Bundling human capital with organization context: The impact of international assignment experience on multinational firm performance and ceo pay. *Academy of Management Journal*. 44:3:493-511.
- Chaubey, M.D., Kulkarni, M.S. (1988). Executive compensation and performance of firms. *Managerial Finance*; 14:14-18.
- Combs, J., Skill, M. (2003). Managerialist and human capital explanations for key executive pay premiums: A contingency perspective. *Academy of Management Journal*. 46:1:63-73.

- Copeland, T., Koller, T., Murrin, J. (2002). *Valuation: Measuring and Managing the Value of Companies*. New York. John Wiley & Sons, Inc
- Core, J., Guay, W., Verrecchia, R. (2003). Price versus non-price performance measures in optimal ceo compensation contracts. *The Accounting Review*. 78:4:957-981.
- Couglan, A.T., Schmidt, R.M. (1985). Executive compensation, management turnover, and firm performance an empirical investigation. *Journal of Accounting and Economics*; 7:43-66.
- Cox, S.R., Shauger, K. (1963). Executive compensation, firm sales, and profitability. *Intermountain Economic Review*; 29-39.
- Cyert, R.M., March, J.G. (1963). *A Behavioral Theory of the Firm*. Englewood Cliffs, N.J.: Prentice Hall.
- Daily, C., Johnson, J., Ellstrand, A. (1998). Compensation committee composition as a determinant of ceo compensation. *Academy of Management Journal*. 41:2:209-220.
- Daily, C.M., Dalton, D.R. (1994). Bankruptcy and corporate governance: The impact of board composition and structure. *Academy of Management Journal*; 37:1603-1617.
- Daily, C.M., Dalton, D.R. (1997). Ceo and board chair roles held jointly or separately: Much ado about nothing? *Academy of Management Journal*; 11:11-20.
- Daily, C.M., Schwenk, C. (1996). Chief executive officers, top management teams, and boards of directors: Congruence of countervailing forces? *Journal of Management*; 22:185-208.
- Dalton, D.R., Kesner, I.F. (1985). Organizational performance as an antecedent of inside/outside chief executive succession: An empirical assessment. *Academy of Management Journal*; 28:749-762.
- Deckop, J.R. (1988). Determinants of chief executive officer compensation. *Industrial and Labor Relations Review*; 41:215-226.
- Delacroix, J., Saudagaran, S.M. (1991). Munificent compensations as disincentives: The case of American CEOs. *Human Relations*; 44:665-677.
- Denis, D., McConnel, J. (2003). International corporate governance. *Journal of Financial and Quantitative Analysis*. 38:1:1-38.
- Dillard, J.F., Fisher, J.G. (1990). Compensation schemes, skill level, and task performance: An experimental examination. *Decision Sciences*; 21:121-13.

- Dobrzynski, J.H. (1991). Chairman and CEO: One hat too many. *Business Week*; 124-124.
- Donaldson, L. (1990). The ethereal hand; Organizational economics and management theory. *Academy of Management Review*; 15:369-381.
- Dunlevy, J.A. (1985). Econometric issues in the analysis of executive compensation: A comment. *The Review of Economics and Statistics*; 67:171-174.
- Dyl, E.A. (1988). Corporate control and management compensation: Evidence on the agency problem. *Managerial and Decision Economics*; 9:21-25.
- Eaton, J., Roden, H.S. (1983). Agency, delayed compensation, and the structure of executive remuneration. *The Journal of Finance*; 38:1489-1505.
- Eisenhardt, K.M. (1985). Control: Organizational and economic approaches. *Management Science*; 31:134-149.
- Eisenhardt, K.M. (1998). Agency and institutional theory explanations: The case of retail sales compensation. *Academy of Management Journal*; 31:488-511.
- Eisenhardt, K.M. (1989). Agency theory: An assessment and review. *Academy of Management Review*; 14:57-74.
- Eldenburg, L., Krishnan, R. (2003). Public versus private governance: A study of incentives and operational performance. *Journal of Accounting and Economics*. 35:377-404.
- Elston, J., Goldberg, L. (2003). Executive compensation and agency costs in Germany. *Journal of Banking & Finance*. 27:1391-1410.
- Fama, E.F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*; 88: 288-307
- Fama, E.F., Jensen, M.C. (1983). Separation of ownership and control. *Journal of Law and Economics*; 26: 301-325.
- Feldman, S. (1990). Taking stock: Money Isn't Everything. *Executive Compensation*: 4:7-8
- Festinger, L. (1957). *A Theory of Cognitive Dissonance*. Evanston Ill.: Row, Peterson.
- Fierman, J. (1990 March). The people who set the ceo's pay. *Fortune*: 58-66

- Fiet, J.O., Kosnik, R.D. (1995). Antecedents of executive compensation: The use of covariance structure modeling. *Managerial Finance*; 21:42-59.
- Finkelstein, S., Boyd, B. (1998). How much does the ceo matter? The role of managerial discretion in the setting of ceo compensation. *Academy of Management Journal*. 41:2:179-200.
- Finkelstein, S., D'Aveni, R.A. (1994). Ceo duality as a double-edged sword: How boards of directors balance entrenchment avoidance and unity of command. *Academy of Management Journal*; 37:1079-1108.
- Finkelstein, S., Hambrick, D.C. (1988). Chief executive compensation: A synthesis and reconciliation. *Strategic Management Journal*; 9: 543-558
- Finkelstein, S., Hambrick, D.C. (1989). Chief executive compensation: A study of the intersection of markets and political processes. *Strategic Management Journal*; 10:121-134.
- Finkelstein, S., Hambrick, D.C. (1990). Top-management-team tenure and organizational outcomes: The moderating role of managerial discretion. *Administrative Science Quarterly*; 35: 484-503.
- Finkelstein, S., Hambrick, D.C. (1996). *Strategic Leadership: Top Executives and their Effects on Organizations*. Chicago: West Publishing Company.
- Fizel, J.L., Louie, K.K.T. (1990) CEO retention, firm performance and corporate governance. *Managerial and Decision Economics*; 11:167-176.
- Fox, H. (1980). *Top Executive Compensation*. New York: The Conference Board
- Galbraith, J.R. (1974). Organization design: An information processing view. *Interfaces*:4:2836.
- Garen, J.E. (1994). Executive compensation and principal – agent theory. *Journal of Political Economy*; 102:1175-1199.
- Garvey, G., Milbourn, T. (2003). Incentive compensation when executives can hedge the market: Evidence of relative performance evaluation in the cross section. *The Journal of Finance*. LVIII:4:1557-1581.
- Gaver, J.J., Gaver, K.M. (1993). Additional evidence on the association between the investment opportunity set and corporate financing, dividend, and compensation policies. *Journal of Accounting and Economics*; 16:125-160.
- Gaver, J.J., Gaver, K.M. (1995). Compensation policy and the investment opportunity set. *Financial Management*; 24:19-32

- Ghemawat, P. (1991). *Commitment: The dynamic of strategy*; New York: Free Press
- Gilson, S.C., Vetsuypens, M.R. (1993). CEO compensation in financially distressed firms: An empirical analysis. *The Journal of Finance*; *XLVIII*:425-458.
- Goldberg, L.G., Idson, T.L. (1995). Executive compensation and agency effects. *The Financial Review*; *30*: 313-335
- Gomez-Mejia, L.R. (1992). Structure and process of diversification, compensation strategy, and firm performance. *Strategic Management Journal*; *13*:381-397.
- Gomez-Mejia, L.R. (1994). Executive compensation: A reassessment and a future research agenda. *Personal and Human Resources Management*; *12*:161-222.
- Gomez-Mejia, L.R., Balkin, D.B. (1992). *Compensation, Organizational Strategy, and Firm Performance*. Cincinnati, South-Western Publishing.
- Gomez-Mejia, L.R., Tosi, H., Hinkin, T. (1987). Managerial control, performance, and executive compensation. *The Academy of Management Journal*. *30* (1): 51-70.
- Greenberg, J., Leventhal, G.S. (1976). Equality and the use of over-reward to motivate performance. *Journal of Personality and Social Psychology*; *34*:179-190.
- Gregoriou, G., Rouah, F. (2002). An examination of ceo compensation of us banks and thrifts using non-traditional performance measures. *Journal of Financial Services Marketing*. *7*:3:246-257.
- Grossman, S.J. (1983). An analysis of the principal – agent problem. *Econometrics*; *51*:7-46.
- Grossman, W. (1995). Does incentive compensation lower executives' willingness to take risks. *Academy of Management Executives*; *9*:91-92.
- Gupta, N. (1980). Some alternative definitions of size. *Academy of Management Journal*; *23*:759-766.
- Hallock, K. (2002). Managerial pay and governance in american nonprofits. *Industrial Relations*. *41*:3:377-406.
- Hambrick, D.C., Abrahamson, E. (1995). Assessing managerial discretion across industries: A multi-method approach. *Academy of Management Journal*; *38*: 1427-1441.

- Hambrick, D.C., Baumrin, S. (1988). A model of ceo dismissal. *Academy of Management Review*; 13:255-270.
- Hambrick, D.C., D'Aveni, F.A. (1992). Top team deterioration as part of the downward spiral of large corporate bankruptcies. *Management Science*; 38:1445-1466.
- Hambrick, D.C., Finkelstein, S. (1987). Managerial discretion: A bridge between polar views of organizations. *Research in Organizational Behavior*; 9: 369-406.
- Hambrick, D.C., Finkelstein, S. (1995). The effects of ownership structure on conditions at the top: The case of ceo pay raises. *Strategic Management Journal*; 16:175-193.
- Hambrick, D.C., Schechter, S.M. (1983). Turnaround strategies for mature industrial product business units. *Academy of Management Journal*; 26:231-248.
- Hambrick, D.C., Snow, C.C. (1989). *Strategic Reward Systems; in Anonymous Strategy, Organization Design and Human Resource Management*. Greenwich, Connecticut: JAI Press, pp. 333 – 368.
- Hannafey, F. (2002). Economic and moral criteria of executive compensation. *Business and Society Review*. 108:3:405-415.
- Hansen, G.S., Wernerfelt, B. (1989). Determinants of firm performance: The relative importance of economic and organizational factors. *Strategic Management Journal*; 10:-399-411.
- Heller, R. (1995). Make fair reward equal fine effort. *Management Today*, 19-19.
- Hermalin, B.E., Weisbach, M.S. (1988). The determinants of board composition. *RAND Journal of Economics*; 19:589-606.
- Hill, N.T., Stevens, K.T. (1995). Ceo compensation and corporate performance. *Journal of General Management*; 20:65-67.
- Hogan, T.D., McPheters, L.R. (1980). Executive compensation: performance versus personal characteristics. *Southern Economic Journal*; 46:1060-1068
- Homans, G.C. (1961). *Social Behavior: Its Elementary Forms*. New York: Harcourt, Brace, & World
- Hotchkiss, J.L. (1990). Compensation policy and firm performance: An annotated bibliography of machine-readable data files. *Industrial and Labor Relations Review*; 43:274S-289S.

- Hunt, H.G. (1986). The separation of corporate ownership and control: Theory, evidence, and implications. *Journal of Accounting Literature*; 5:85-124.
- Husz, M. (1998). *Human Capital, Endogenous Growth, and Government Policy*. Peter Lang GmbH, Frankfurt and Main.
- Jaques, E. (1961). *Equitable Payment*. New York: John Wiley
- Jensen, M.C., Meckling, W.H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*; 3: 305-360.
- Jensen, M.C. (1983). Separation of ownership and control. *Journal of Law and Economics*; 26:301-325.
- Jensen, M.C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance*; XLVIII:831-880.
- Jones, G.R., Butler, J.E. (1992). Managing internal corporate entrepreneurship: An agency theory perspective. *Journal of Management*; 18:733-749.
- Kerr, J.L. (1985). Diversification strategies and managerial rewards: An empirical study. *Academy of Management Journal*; 28:155-179.
- Kerr, J.L., Bettis, R.A. (1987). Boards of directors, top management compensation, and shareholder returns. *Academy of Management Journal*; 30:645-664.
- Kerr, J.L., Kren, L. (1992). Effect of relative decision monitoring on chief executive compensation. *Academy of Management Journal*; 35:370-397.
- Kesner, I.F. (1988). Directors; Characteristics and committee membership: An investigation of type, occupation, tenure, and gender. *Academy of Management Journal*; 31:66-84.
- Kessler, A.S., Lulfesmann, C. (2002). The Greenwich, theory of human capital revisited: On the interaction of general and specific investments, economics conference paper, University of Bonn
- Kostiuk, P.F. (1989). Firm size and executive compensation. *The Journal of Human Resources*; 25:90-105.
- Lambert, R.A., Larcker, D.F., Weigelt, K. (1991). How sensitive is executive compensation to organizational size? *Strategic Management Journal*; 12:395-402.
- Lambert, R.A., Larcker, D.F., Weigelt, K. (1993). The structure of organizational incentives. *Administrative Science Quarterly*; 38:438-461.

- Lawler, E.E. (1971). *Pay and Organizational Effectiveness: A Psychological View*. New York: McGraw-Hill Book Co.
- Leonard, B. (1994). Ceo compensation packages tied to performance. *HR Magazine*:51-52.
- Leonard, J.S. (1990) Executive pay and firm performance. *Industrial and Labor Relations Review*; 43:13-29.
- Leventhal, D. (1988). A survey of agency models of organization. *Journal of Economic Behavior and Organization*; 9:153-185.
- Lewellen, W.G., Huntsman, B. (1970). Managerial pay and corporate performance. *American Economic Review*. 60: 710-720.
- Lewellen, W.G. (1975). Recent evidence on senior executive pay. *National Tax Journal*; 28:159-172.
- Lieberson, S., O'Connor, J.F. (1972). Leadership and organizational performance: A study of large corporations. *American Sociological Review*; 37: 117-130
- Lorsch, J.W. (1995). Empowering the board. *Harvard Business Review*: January-February: 107-117.
- Lowe, K., Milliman, J., De Cieri, H., Dowling, P. (2002). International compensation practices: A ten-country comparative. *Human Resource Management*. 41:1:45-59.
- MacGuire, J., Dow, S. (1998). *Ownership Structure, Executive Compensation and Firm Performance: A Comparison of Canada and the United States*. 1-30.
- Mahoney, T.A. (1979). Organization hierarchy and position worth. *Academy of Management Journal*; 22: 726-737.
- Main, B.G. (1991). Top executive pay and performance. *Managerial and Decision Economics*; 12:219-229.
- Main, B.G., Crystal, G.S. (1988). Ceo compensation as tournament and social comparison: A tale of two theories. *Administrative Science Quarterly*; 33:257-274.
- Mallette, P., Middlemist, R.D., Hopkins, W.E. (1995). Social, political, and economic determinants of chief executive compensation. *Journal of Managerial Issues*; 7:253-276.

- Masson, R.T. (1971). Executive motivation earnings, and consequent equity performance. *The Journal of Political Economy*; 79:1278-1292.
- McEachern, W.A. (1975). *Managerial Control and Performance*. Lexington, Mass.: D.C. Heath Co.
- Miller, J., Wiseman, R., Gomez-Mejia, L. (2002). The fit between ceo compensation design and firm risk. *Academy of Management Journal*. 45:4:745-756.
- Moskowitz, G. T. (1998). The effects of performance, risk, human capital, board structure, and nonprofit status on hospital ceo compensation. 1-36.
- Murphy, K.J. (1985). Corporate performance and managerial remuneration. An empirical analysis. *Journal of Accounting and Economics*; 7:11-42.
- Murphy, K.J. (2002). Explaining executive compensation: Managerial power versus the perceived cost of stock options. *The University of Chicago Law Review*. 69:3:847-869.
- Murphy, R. (1999). *A Study of CEO Compensation and Firm Performance Across Companies with High, Medium and Low Managerial Discretion*; Dissertation: Nova Southeastern University.
- Palmer, J. (1973). The profit variability effects of managerial enterprise. *Western Economic Journal*. 2: 228-231.
- Parks, J.M., Conlon, E.J. (1995). Compensation contracts: Do agency theory assumptions predict negotiated agreements? *Academy of Management Journal*; 38:821-838
- Patchen, M. (1959). *Study of Work and Life Satisfaction: Absences and Attitudes Toward Work Experiences*. Ann Arbor: Institute for Social Research.
- Pearce, J.L., Stevenson, W.B., Perry, J.L. (1985). Managerial compensation based on organizational performance: A time series analysis of the effects of merit pay. *Academy of Management Journal*; 28:261-278.
- Pennings, J.M. (1993). Executive reward systems: A cross-national comparison. *Journal of Management Studies*; 30:2:261-280.
- Persons, O. (2001). The relationship between foreign vs. domestic earnings and executive compensation. *The Mid-Atlantic Journal of Business*; 37:123-137.
- Pfeffer, J. (1972). Size and composition of corporate boards of directors: The organization and its environment; *Administrative Science Quarterly*; 17:218-228.

- Pfeffer, J. (1981). Management as symbolic action: The creation and maintenance of organizational paradigms. *Research in Organizational Behavior*; 3:1-52.
- Prasad, S.B. (1974). Top management compensation and corporate performance. *Academy of Management Journal*; 17:554-559.
- Rajagopalan, N., Datta, D.K. (1996). Ceo characteristics: Does industry matter? *Academy of Management Journal*; 39: 197-216.
- Rajagopalan, N.K., Finkelstein, S. (1992). Effects of strategic orientation and environmental change of senior management reward systems. *Strategic Management Journal*; 13:127-142.
- Rajagopalan, N. (1996). Strategic orientations, incentive plan adoptions, and firm performance: Evidence from electric utility firms. *Strategic Management Journal*; 18:761-142.
- Rajagolpalan, N., Prescott, J.E. (1990). Determinants of top management compensation: explaining the impact of economic, behavioral, and strategic constructs and the moderating effects of industry. *Journal of Management*; 16:515-538.
- Redling, E.T. (1981). Myth vs. reality: The relationship between top executive pay and corporate performance. *Compensation Review*; 13(4): 16-24.
- Reinharth, L., Wahba, M. (1975). Expectancy theory as a predictor of work motivation, effort expenditure, and job performance. *Academy of Management Journal*. 18: 520 - 537
- Reinganum, M.R. (1985). The effect of executive succession on stockholder wealth. *Administrative Science Quarterly*; 30:46-60.
- Rhoades, D.L., Rechner, P.L., Sundaramurthy, C. (1998). *A Meta-Analysis of Board Leadership Structure and Financial Performance: Are "Two Heads Better than One"*. 1-20: Boston University:Dissertation.
- Rich, J.T., Larson, J.A. (1984). Why some long term incentives fail. *Compensation Review*. 16(1): 26-37.
- Roberts, D.R. (1959). *Executive Compensation*. Glencoe, Ill.: Free Press
- Roth, K. (1995). Managing international interdependence: Ceo characteristics in a resource based framework. *Academy of Management Journal*; 38:200-231.
- Roth, K., O'Donnell, S. (1996). *Foreign Subsidiary Compensation Strategy: An Agency Theory Perspective*. (Unpublished)

- Rumelt, R.P. (1991). How much does industry matter. *Strategic Management Journal*; 12:167-185.
- Salanick, G.R., Pfeffer, J. (1977). Constraints on administrator discretion. *Urban Affairs Quarterly*; 12: No. 4: 474-498
- Salanick, G.R., Pfeffer, J. (1980). Effects of ownership and performance on executive tenure in u.s. corporations. *Academy of Management Journal*. 23:653-664.
- Saloman, G.L., Smith, E.D. (1979). Corporate control and management misrepresentation of firm performance. *Bell Journal of Economics*. 10:319-328.
- Sanders, W.G., Carpenter, M.A. (1998). Internationalization and firm governance: The roles of ceo compensation, top team composition, and board structure. *Academy of Management Journal*. 41:2:158-178.
- Santerre, R.E., Neun, S.P. (1996). Stock dispersion and executive compensation. *The Review of Economics and Statistics*; 68:685-687.
- Shavell, S. (1979). Risk sharing and incentives in the principal and agent relationship. *The Bell Journal of Economics*; 10:55-73.
- Shultz, P.T. (1992). The role of education and human capital in economic development: An empirical assessment. *Conference Paper Economic Growth in the World Economy, Institut fur Weltwirtschaft, Kiel*.
- Sigler, K. (2003). Ceo compensation and healthcare organization performance. *Management Research News*. 26:6:31
- Simon, H.A., (1957). Compensation of executives. *Sociometry*; XX: 32-35
- Singh, H.G., Hatianto, F. (1989). Top management tenure;, Corporate ownership structure and the magnitude of golden parachutes. *Strategic Management Journal*; 10:143-156.
- Snow, C.C., Thomas, J.B. (1994). Field research methods in strategic management: contributions to theory building and testing. *Journal of Management Studies*; 31:547-480.
- Taussig, F.W., Barker, W.S. (1925). American corporations and their executives: A statistical inquiry. *Quarterly Journal of Economics*; 40: 1-51
- Tosi, H.L., Gomez-Mejia, L.R. (1989). The decoupling of ceo pay and performance: An agency theory perspective. *Administrative Science Quarterly*; 34:169-189.

- Tosi, H.L., Gomez-Mejia, L.R. (1994). Ceo compensation monitoring and firm performance. *Academy of Management Journal*; 37:1002-1016.
- Tosi, H.L., Katz, J.P., Gomez-Mejia, L.R. (1997). Desegregating the agency contract: The effects of monitoring, incentive alignment, and term in office on agent decision making. *The Academy of Management Journal*; 40: 584-602.
- Tosi, H.L., Katz, J.P., Gomez-Mejia, L.R. (1998). A meta-analysis of executive compensation studies. University of Florida at Gainesville: non-published manuscript.
- Tosi, H.L., Werner, S. (1995). Managerial discretion and the design of compensation strategy. *Academy of Management Journal*; 40:584-602.
- Veliyath, R., Bishop, J.W. (1995). Relationship between ceo compensation and firm performance: Empirical evidence of labor market norms. *The International Journal of Organizational Analysis*; 3:268-283
- Venkatraman, N., Grant, J.H. (1996). Construct measurement in organizational strategy research: A critique and proposal. *Academy of Management Review*; 11:71-87.
- Vroom, V.H. (1964). *Work and Motivation*. New York, Wiley.
- Wallace, Jr.M.J. (1973). Executive compensation: Two determinants. *Compensation Review*; 5:18-23.
- Walters, B., Hardin, T., Shick, J. (1995). Top executive compensation: Equity or excess? implications for regaining american competitiveness. *Journal of Business Ethics*; 14:227-234.
- Weisbach, M.S. (1987). Outside directors and ceo turnover. *Journal of Financial Economics*; 20:431-460
- Werner, S., Tosi, H.L. (1995). Other people's money: The effects of ownership on compensation strategy and managerial pay. *Academy of Management Journal*; 38;1-19.
- Westphal, J.D., Azjac, E.J. (1994). Substance and symbolism in ceo's long-term incentive plans. *Administrative Science Quarterly*; 39:367-390.
- Westphal, J.D., Zajac, E.J. (1995). Who shall govern? Ceo board power, demographic similarity, and new director selection. *Administrative Science Quarterly*; 40:60-83

- Westphal, J.D., Zajac, E.J. (1997). Defections from the inner circle: Social exchange, reciprocity, and the diffusion of board independence in u.s. corporations. *Administrative Science Quarterly*; 42:161-183.
- Williamson, O.E. (1964). *The Economics of Discretionary Behavior: Managerial Objectives in a Theory of the firm*. Englewood Cliffs, N.J.: Prentice-Hall.
- Wright, P., Kroll, M. (2002). Executive discretion and corporate performance as determinants of ceo compensation, Contingent on external monitoring activities. *Journal of Management and Governance*; 6: 189-214.
- Young, M., Buchholtz, A. (2002). Firm performance and ceo pay: Relational demography as a moderator. *Journal of Managerial Issues*. 14:3:296-313.
- Zajac, E.J. (1990). Ceo selection, succession, compensation and firm performance: A theoretical integration and empirical analysis. *Strategic Management Journal*; 11:217-230.
- Zajac, E.J., Westphal, J.D. (1988). Interlocking directorates as an inter-organizational strategy: A test of critical assumptions. *Academy of Management Journal*; 31:428-438.
- Zajac, E.J., Westphal, J.D. (1994). The costs and benefits of managerial incentives and monitoring in large u.s. corporations: When is more not better? *Strategic Management Journal*; 15:121-142.
- Zajac, E.J., Westphal, J.D. (1996). Director reputation, ceo board power, and the dynamics of board interlocks. *Administrative Science Quarterly*; 41:507-529.
- Zaleznik, A., Christensen, C.R. (1958). *The Motivation, Productivity and Satisfaction of Workers*. Boston: Harvard University Graduate School of Business Administration

Bibliography

- Abowd, J.M. (1990). Does performance based managerial compensation affect corporate performance? *Industrial and Labor Relations Review*; 43:525S-73S.
- Adams, S.J. (1963) Toward an understanding of inequity. *Journal of Abnormal and Social Psychology*. 67:5: 422-436.
- Adut, D., Cready, W., Lopez, T. (2003). Restructuring charges and CEO cash compensation. *The Journal of Accounting Review*; 78; 169-192.
- Aggarwal, N.C. (1981). Determinants of executive compensation. *Industrial Relations*; 20: 36-46.
- Aggarwal, R., Samwick, A. (2003). Performance incentives within /firms: The effect of managerial responsibility. *The Journal of Finance*; LVIII:4:1613-1649.
- Alchian, A., Demsetz, H. (1972). Corporate management and property rights. *A.E.R.*: 77-95
- Anderson, R., Bizjak, J. (2003). An empirical examination of the role of the CEO and the compensation committee in structuring executive pay. *Journal of Banking & Finance*; 27:1323-1348.
- Andrews, K. (1996, January/February). Briefings from the editors. *Harvard Business Review*. 121: 8-9.
- Antle, R., Smith, A. (1985). Measuring executive compensation: Methods and an application. *Journal of Accounting Research*; 23:296-325.
- Antle, R., Smith, A. (1986). An empirical investigation of the relative performance evaluation of corporate executives. *Journal of Accounting Research*: 24:1-39.
- Atchison, A.J., Belcher, D.W., Thomsen, D.J. (2002). *Internet Bases Benefits & Compensation Administration*. Boston: ERI Economic Research Institute
- Aupperle, K.E., Figler, R.A., Lutz, R.C. (1991). Do the in search of excellence firms effectively match CEO compensation to corporate performance? *Journal of Managerial Issues*; 3:445-457.
- Baker, G., Hall, B. (2002). CEO incentives and firm size. *Journal of Labor Economics*; 25: 423-437.

- Balkin, D.B., Gomez-Mejia, L.R. (1987). Toward a contingency theory of compensation strategy. *Strategic Management Journal*; 8:169-182.
- Balkin, D.B., Gomez-Mejia, L.R. (1990). Matching organizational strategies. *Strategic Management Journal*; 11:153-169.
- Balsam, S. (2002). *An Introduction to Executive Compensation*. San Diego: Academic Press.
- Banning, K., Tosi, H. (1999). The board and the new chief executive: Some constraints on the agency contract following CEO succession. Unpublished doctoral dissertation/*Boston University*, Boston.
- Barkema, H.G. (1995). Do top managers work harder when they are motivated? *KYLOS*; 48:19-42.
- Barkema, H.G. (1996). The effects of board control and compensation mix on strategic orientation. *Advances in International Comparative Management*; 11:127-141.
- Barkema, H.G., Gomez-Mejia, L.R. (1998). Managerial compensation and firm performance: A general research framework. *The Academy of Management Journal*; 41: 135-145.
- Barkema, H.G., Gomez-Mejia, L.R. (1998). Relationship among risk, incentive pay, and organizational performance. *Academy of Management Journal*. 41:283-297.
- Barro, J.R., Barro, R.J. (1990) Pay, performance, and turnover of bank CEOs. *Journal of Labor Economics*; 8:448-481.
- Barron, J.M. (2003). Executive rank, pay, and project selection. *Journal of Financial Economics*; 67: 305-349.
- Bartlett, C.A., Ghosal, S. (1994, November/December). Changing the role of top management beyond strategy to purpose. *Harvard Business Review*: 114:79-80.
- Baumol, W.J. (1959). *Business Behavior, Value and Growth*. New York, MacMillan.
- Beatty, R.P., Zajac, E.J. (1994). Managerial incentives, monitoring, and risk bearing: A study of executive compensation, ownership, and board structure in initial public offerings. *Administrative Science Quarterly*; 39:313-335.
- Bebchuk, L., Fried, J., Walker, D. (2002). Managerial power and rent extraction in design executive compensation. *The University of Chicago Law Review*. 69:751-846.

- Bebchuk, L., Fried, J. (2003). Executive compensation as an agency problem. *Journal of Economic Perspectives*. 17:3:71-92.
- Bebchuk, L., Coates, J., Subramanian, G. (2002). The powerful antitakeover force of staggered boards: Theory, evidence, and policy. *Stanford Law Review*; 54:5; 887-951.
- Becker, G.S. (1993). *Human Capital: A theoretical and Empirical Analysis, with Special Reference to Education*. Chicago: University of Chicago Press.
- Berle, A., Means, G. (1932). *The Modern Corporation and Private Property*. New York: MacMillian.
- Bertrand, M., Mullainathan, S. (2000). Agents with and without principals. *The American Economic Review*. 90:2: 203-208.
- Bertrand, M., Mullainathan, S. (2001). Are CEOs rewarded for luck? The ones without principals are. *Quarterly Journal of Economics*; 16:3; 901-932.
- Bettis, J., Bizjak, J., Lemmon, M. (2001). Managerial ownership, incentive contracting, and the use of zero-cost collars and equity swaps by corporate insiders. *Journal of Financial and Quantitative Analysis*; 36(3): 345-370.
- Bliss, R., Rosen, R. (2001). CEO compensation and bank mergers. *Journal of Financial Economics*; 61: 107-138.
- Boschen, J., Augustine, D., Gordon, L., Smith, K. (2003). Accounting and stock price performance in dynamic CEO compensation arrangements. *The Accounting Review*. 78:1:143-168.
- Boschen, J., Duru, A., Gordon, L., Smith, K. (2003). Accounting and stock price performance in dynamic CEO compensation arrangements. *The Accounting Review*; 78 (1): 143-168.
- Bosworth, W., Mehdian, S., Vogel, T. (2003). Executive compensation and efficiency: A study of large and medium sized bank holding companies. *American Business Review*. 21:1:91-99.
- Beyer, J.M., Trice, H.M. (1979). A reexamination of the relations between size and various components of organizational complexity. *Administrative Science Quarterly*; 24:48-64.
- Blair, R., Kaserman, L. (1983) Ownership and control in modern organizations: Antitrust implications. *Journal of Business Research*. 11: 333-344.

- Boyd, B.K. (1993). Board control and CEO compensation. *Strategic Management Journal*; 15:335-344.
- Boyd, B.K. (1994). CEO duality and firm performance: A contingency model. *Strategic Management Journal*; 16:301-312
- Boyd, B.K., Dess, G.G., Rechner, P.L. (1993). Divergence between archival and perceptual measures of the environment: Causes and consequences. *Academy of Management Review*; 18:204-226.
- Brickley, J.A., Bhagat, S., Lease, R.C. (1984). The impact of long-range managerial compensation plans on shareholders wealth. *Journal of Accounting and Economics*; 7:115-129.
- Bromiley, P. (1991). Testing a causal model of corporate risk taking and performance. *Academy of Management Journal*; 34:37-59.
- Bushman, R., Chen, Q., Engel, E., Smith, A. (2000). The sensitivity of corporate governance systems to the timeliness of accounting earnings. *Working Paper*: University of Chicago.
- Bushman, R., Smith, A. (2001). Financial accounting information and corporate governance. *Journal of Accounting and Economics*; 32 (1-3): 237-333.
- Campa, J.M., Kedia, S. (2002). Explaining the diversification discount. *Journal of Finance*; 57: 1731-1763.
- Carpenter, M.A., Fredrickson, J.W. (2001). Top management teams, global strategic posture, and the moderating role of uncertainty. *Academy of Management Journal*; 44: 533-545
- Carpenter, M.A., Golden, B.R. (1997). Perceived managerial discretion: A study of cause and effect. *Strategic Management Journal*; 18:3:187-206.
- Carpenter, M.A., Sanders, W.G. (2001). Bundling human capital with organization context: The impact of international assignment experience on multinational firm performance and ceo pay. *Academy of Management Journal*. 44:3:493-511.
- Carpenter, M.A., Westphal, J.D. (2001). The strategic context of external network ties: Examining the impact of director appointments on board involvement in strategic decision making. *Academy of Management Journal*; 45: 152-171.
- Chaubey, M.D., Kulkarni, M.S. (1988). Executive compensation and performance of firms. *Managerial Finance*; 14:14-18.

- Chen, S., Ho, K. (2000). Corporate diversification, ownership structure, and firm value: The Singapore evidence. *International Review of Financial Analysis*; 9: 315-326.
- Claessens, S., Djankov, S. Lang, L. (2000). The separation of ownership and control in East Asian corporations. *Journal of Financial Economics*; 58: 81-112.
- Combs, J., Skill, M. (2003). Managerial and human capital explanations for key executive pay premiums: A contingency perspective. *Academy of Management Journal*. 46:1:63-73.
- Conyon, M.J., Murphy, K.J. (2000). The prince and the pauper? CEO pay in the United States and United Kingdom. *Economic Journal*; 110: F640-F671.
- Copeland, T., Koller, T., Murrin, J. (2002). *Valuation: Measuring and Managing the Value of Companies*. New York. John Wiley & Sons, Inc
- Core, J., Guay, W. (2002). Estimating the value of employee stock option portfolio and their sensitivities to price and volatility. *Journal of Accounting Research*; 40 (3): 613-630
- Core, J., Guay, W., Verrecchia, R. (2003). Price versus non-price performance measures in optimal ceo compensation contracts. *The Accounting Review*. 78:4:957-981.
- Core, J., Holthausen, R., Larcker, D. (1999). Corporate governance, chief executive officer compensation and firm performance. *Journal of Financial Economics*; 51, 371-406.
- Couglan, A.T., Schmidt, R.M. (1985). Executive compensation, management turnover, and firm performance an empirical investigation. *Journal of Accounting and Economics*; 7:43-66.
- Cox, S.R., Shauger, K. (1963). Executive compensation, firm sales, and profitability. *Intermountain Economic Review*; 29-39.
- Cyert, R.M., March, J.G. (1963). *A Behavioral Theory of the Firm*. Englewood Cliffs, N.J.: Prentice Hall.
- Cyert, R.M., Kang, S.H., Kumar, P. (2002). Corporate governance, takeovers, and top-management compensation: Theory and evidence. *Management Science*; 48:4; 453-469.
- Dahlquist, M., Pinkowitz, R., Williamson, R. (2003). Corporate governance and the home bias. *Journal of Quantitative and Financial Analysis*; 38: 87-110.

- Dahya, J., McConnell, J. (2002). The Cadebury Committee, corporate performance and top management turnover. *Journal of Finance*; 57: 461-483
- Daily, C., Johnson, J., Ellstrand, A. (1998). Compensation committee composition as a determinant of ceo compensation. *Academy of Management Journal*. 41:2:209-220.
- Daily, C.M., Dalton, D.R. (1994). Bankruptcy and corporate governance: The impact of board composition and structure. *Academy of Management Journal*; 37:1603-1617.
- Daily, C.M., Dalton, D.R. (1997). Ceo and board chair roles held jointly or separately: Much ado about nothing? *Academy of Management Journal*; 11:11-20.
- Daily, C.M., Schwenk, C. (1996). Chief executive officers, top management teams, and boards of directors: Congruence of countervailing forces? *Journal of Management*; 22:185-208.
- Dalton, D.R., Kesner, I.F. (1985). Organizational performance as an antecedent of inside/outside chief executive succession: An empirical assessment. *Academy of Management Journal*; 28:749-762.
- Deckop, J.R. (1988). Determinants of chief executive officer compensation. *Industrial and Labor Relations Review*; 41:215-226.
- Delacroix, J., Saudagaran, S.M. (1991). Munificent compensations as disincentives: The case of American CEOs. *Human Relations*; 44:665-677.
- Demirguc, K., Maksimovic, V. (2002). Funding growth in bank-based and market-based financial systems: Evidence from firm-level data. *Journal of Financial Economics*; 65: 337-364.
- Denis, D. (2001). Twenty-five years of corporate governance research...and counting. *Review of Financial Economics*; 10: 191-212.
- Denis, D., McConnel, J. (2003). International corporate governance. *Journal of Financial and Quantitative Analysis*. 38:1:1-38.
- Denis, D., Sarin, A. (1999). Ownership and board structures in publicly traded corporations. *Journal of Financial Economics*; 52, 187-223.
- Dewenter, K, Malatesta, P. (2001). State-owned and privately-owned firms: An empirical analysis of profitability, leverage, and labor intensity. *American Economic Review*; 91: 320-334.

- Dillard, J.F., Fisher, J.G. (1990). Compensation schemes, skill level, and task performance: An experimental examination. *Decision Sciences*; 21:121-13.
- Dittmar, A, Mahrt-Smith, J., Servaes, H. (2003). International corporate governance and corporate cash holdings. *Journal of Financial and Quantitative Analysis*; 38: 111-133.
- Dobrzynski, J.H. (1991). Chairman and CEO: One hat too many. *Business Week*; 124-124.
- Donaldson, L. (1990). The ethereal hand; Organizational economics and management theory. *Academy of Management Review*; 15:369-381.
- Dunlevy, J.A. (1985). Econometric issues in the analysis of executive compensation: A comment. *The Review of Economics and Statistics*; 67:171-174.
- Durnev, A., Kim, E. (2002). To steal or not to steal: Firm characteristics, legal environment, and valuation. Working Paper, University of Michigan
- Dyl, E.A. (1988). Corporate control and management compensation: Evidence on the agency problem. *Managerial and Decision Economics*; 9:21-25.
- Eaton, J., Roden, H.S. (1983). Agency, delayed compensation, and the structure of executive remuneration. *The Journal of Finance*; 38:1489-1505.
- Eisenhardt, K.M. (1985). Control: Organizational and economic approaches. *Management Science*; 31:134-149.
- Eisenhardt, K.M. (1998). Agency and institutional theory explanations: The case of retail sales compensation. *Academy of Management Journal*; 31:488-511.
- Eisenhardt, K.M. (1989). Agency theory: An assessment and review. *Academy of Management Review*; 14:57-74.
- Eldenburg, L., Krishnan, R. (2003). Public versus private governance: A study of incentives and operational performance. *Journal of Accounting and Economics*. 35:377-404.
- Elston, J., Goldberg, L. (2003). Executive compensation and agency costs in Germany. *Journal of Banking & Finance*. 27:1391-1410.
- Esty, B., Megginson, W. (2003). Creditor rights, enforcement, and debt ownership structure: Evidence from the global syndicated loan market. *Journal of Financial and Quantitative Analysis*; 38: 37-59.

- Faccio, M., Lang, L. (2002). The ultimate ownership of western European corporations. *Journal of Financial Economics*; 65: 365-396.
- Fama, E.F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*; 88: 288-307
- Fama, E.F., Jensen, M.C. (1983). Separation of ownership and control. *Journal of Law and Economics*; 26: 301-325.
- Fauver, L., Houston, J., Naranjo, A. (2003). Capital market development, international integration, legal systems, and the value of corporate diversification: A cross-country analysis. *Journal of Financial and Quantitative Analysis*; 38: 135-157.
- Feldman, S. (1990). Taking stock: Money Isn't Everything. *Executive Compensation*: 4:7-8
- Festinger, L. (1957). *A Theory of Cognitive Dissonance*. Evanston Ill.: Row, Peterson.
- Fierman, J. (1990 March). The people who set the ceo's pay. *Fortune*: 58-66
- Fiet, J.O., Kosnik, R.D. (1995). Antecedents of executive compensation: The use of covariance structure modeling. *Managerial Finance*; 21:42-59.
- Finkelstein, S., Boyd, B. (1998). How much does the ceo matter? The role of managerial discretion in the setting of ceo compensation. *Academy of Management Journal*. 41:2:179-200.
- Finkelstein, S., D'Aveni, R.A. (1994). Ceo duality as a double-edged sword: How boards of directors balance entrenchment avoidance and unity of command. *Academy of Management Journal*; 37:1079-1108.
- Finkelstein, S., Hambrick, D.C. (1988). Chief executive compensation: A synthesis and reconciliation. *Strategic Management Journal*; 9: 543-558
- Finkelstein, S., Hambrick, D.C. (1989). Chief executive compensation: A study of the intersection of markets and political processes. *Strategic Management Journal*; 10:121-134.
- Finkelstein, S., Hambrick, D.C. (1990). Top-management-team tenure and organizational outcomes: The moderating role of managerial discretion. *Administrative Science Quarterly*; 35: 484-503.
- Finkelstein, S., Hambrick, D.C. (1996). *Strategic Leadership: Top Executives and their Effects on Organizations*. Chicago: West Publishing Company.

- Fizel, J.L., Louie, K.K.T. (1990) CEO retention, firm performance and corporate governance. *Managerial and Decision Economics*; 11:167-176.
- Fox, H. (1980). *Top Executive Compensation*. New York: The Conference Board
- Franks, J., Mayer, C. (2001). Ownership and control of German corporations. *Review of Financial Studies*; 14: 943-977.
- Franks, J., Mayer, C., Renneboog, L. (2001). Who disciplines management in poorly performing companies? *Journal of Financial Intermediation*; 10: 209-248.
- Galbraith, J.R. (1974). Organization design: An information processing view. *Interfaces*:4:2836.
- Garen, J.E. (1994). Executive compensation and principal – agent theory. *Journal of Political Economy*; 102:1175-1199.
- Garvey, G., Milbourn, T. (2003). Incentive compensation when executives can hedge the market: Evidence of relative performance evaluation in the cross section. *The Journal of Finance*. LVIII:4:1557-1581.
- Gaver, J.J., Gaver, K.M. (1993). Additional evidence on the association between the investment opportunity set and corporate financing, dividend, and compensation policies. *Journal of Accounting and Economics*; 16:125-160.
- Gaver, J.J., Gaver, K.M. (1995). Compensation policy and the investment opportunity set. *Financial Management*; 24:19-32
- Ghemawat, P. (1991). *Commitment: The dynamic of strategy*; New York: Free Press
- Giannetti, M. (2003). Do better institutions mitigate agency problems: Evidence from corporate finance choices. *Journal of Financial and Quantitative Analysis*; 38: 185-212.
- Gibson, M. (2003). Is corporate governance ineffective in emerging markets? *Journal of Financial and Quantitative Analysis*; 38: 231-250.
- Gilson, S.C., Vetsuypens, M.R. (1993). CEO compensation in financially distressed firms: An empirical analysis. *The Journal of Finance*; XLVIII:425-458.
- Goldberg, L.G., Idson, T.L. (1995). Executive compensation and agency effects. *The Financial Review*; 30: 313-335
- Gomez-Mejia, L.R. (1992). Structure and process of diversification, compensation strategy, and firm performance. *Strategic Management Journal*; 13:381-397.

- Gomez-Mejia, L.R. (1994). Executive compensation: A reassessment and a future research agenda. *Personal and Human Resources Management*; 12:161-222.
- Gomez-Mejia, L.R., Balkin, D.B. (1992). *Compensation, Organizational Strategy, and Firm Performance*. Cincinnati, South-Western Publishing.
- Gomez-Mejia, L.R., Tosi, H., Hinkin, T. (1987). Managerial control, performance, and executive compensation. *The Academy of Management Journal*. 30 (1): 51-70.
- Gorton, G., Schmid, F. (2000). Universal banking and the performance of German firms. *Journal of Financial Economics*; 58: 28-80.
- Graham, J., Lemmon, M., Wolf, J. (2001). Does corporate diversification destroy value? *Journal of Finance*; 57: 695-720.
- Greenberg, J., Leventhal, G.S. (1976). Equality and the use of over-reward to motivate performance. *Journal of Personality and Social Psychology*; 34:179-190.
- Gregoriou, G., Rouah, F. (2002). An examination of ceo compensation of us banks and thrifts using non-traditional performance measures. *Journal of Financial Services Marketing*. 7:3:246-257.
- Grossman, S.J. (1983). An analysis of the principal – agent problem. *Econometrics*; 51:7-46.
- Grossman, W. (1995). Does incentive compensation lower executives' willingness to take risks. *Academy of Management Executives*; 9:91-92.
- Gupta, N. (1980). Some alternative definitions of size. *Academy of Management Journal*; 23:759-766.
- Hallock, K. (2002). Managerial pay and governance in american nonprofits. *Industrial Relations*. 41:3:377-406.
- Hambrick, D.C., Abrahamson, E. (1995). Assessing managerial discretion across industries: A multi-method approach. *Academy of Management Journal*; 38: 1427-1441.
- Hambrick, D.C., Baumrin, S. (1988). A model of ceo dismissal. *Academy of Management Review*; 13:255-270.
- Hambrick, D.C., D'Aveni, F.A. (1992). Top team deterioration as part of the downward spiral of large corporate bankruptcies. *Management Science*; 38:1445-1466.

- Hambrick, D.C., Finkelstein, S. (1987). Managerial discretion: A bridge between polar views of organizations. *Research in Organizational Behavior*; 9: 369-406.
- Hambrick, D.C., Finkelstein, S. (1995). The effects of ownership structure on conditions at the top: The case of ceo pay raises. *Strategic Management Journal*; 16:175-193.
- Hambrick, D.C., Schechter, S.M. (1983). Turnaround strategies for mature industrial product business units. *Academy of Management Journal*; 26:231-248.
- Hambrick, D.C., Snow, C.C. (1989). *Strategic Reward Systems; in Anonymous Strategy, Organization Design and Human Resource Management*. Greenwich, Connecticut: JAI Press, pp. 333 – 368.
- Hannafey, F. (2002). Economic and moral criteria of executive compensation. *Business and Society Review*. 108:3:405-415.
- Hansen, G.S., Wernerfelt, B. (1989). Determinants of firm performance: The relative importance of economic and organizational factors. *Strategic Management Journal*; 10:-399-411.
- Hansmann, H, Kraakman, R. (2001). The end of history for corporate law. *Georgetown Law Journal*: 89: 439-468.
- Hayes, R., Schaefer, S. (2000). Implicit contracts and the explanatory power of top executive compensation for future performance. *The Rand Journal of Economics*; 31; 273-293.
- Heller, R. (1995). Make fair reward equal fine effort. *Management Today*, 19-19.
- Hermalin, B.E., Weisbach, M.S. (1988). The determinants of board composition. *RAND Journal of Economics*; 19:589-606.
- Hill, N.T., Stevens, K.T. (1995). Ceo compensation and corporate performance. *Journal of General Management*; 20:65-67.
- Hogan, T.D., McPheters, L.R. (1980). Executive compensation: performance versus personal characteristics. *Southern Economic Journal*; 46:1060-1068
- Homans, G.C. (1961). *Social Behavior: Its Elementary Forms*. New York: Harcourt, Brace, & World
- Hotchkiss, J.L. (1990). Compensation policy and firm performance: An annotated bibliography of machine-readable data files. *Industrial and Labor Relations Review*; 43:274S-289S.

- Hunt, H.G. (1986). The separation of corporate ownership and control: Theory, evidence, and implications. *Journal of Accounting Literature*; 5:85-124.
- Husz, M. (1998). *Human Capital, Endogenous Growth, and Government Policy*. Peter Lang GmbH, Frankfurt and Main.
- Jaques, E. (1961). *Equitable Payment*. New York: John Wiley
- Jensen, M.C., Meckling, W.H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*; 3: 305-360.
- Jensen, M.C. (1983). Separation of ownership and control. *Journal of Law and Economics*; 26:301-325.
- Jensen, M.C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance*; XLVIII:831-880.
- Jin, L. (2002). CEO compensation, diversification, and incentives, *Journal of Financial Economics*; 66, 29-63.
- Jones, G.R., Butler, J.E. (1992). Managing internal corporate entrepreneurship: An agency theory perspective. *Journal of Management*; 18:733-749.
- Kerr, J.L. (1985). Diversification strategies and managerial rewards: An empirical study. *Academy of Management Journal*; 28:155-179.
- Kerr, J.L., Bettis, R.A. (1987). Boards of directors, top management compensation, and shareholder returns. *Academy of Management Journal*: 30:645-664.
- Kerr, J.L., Kren, L. (1992). Effect of relative decision monitoring on chief executive compensation. *Academy of Management Journal*; 35:370-397.
- Kesner, I.F. (1988). Directors; Characteristics and committee membership: An investigation of type, occupation, tenure, and gender. *Academy of Management Journal*; 31:66-84.
- Kessler, A.S., Lulfesmann, C. (2002). The Greenwich, theory of human capital revisited: On the interaction of general and specific investments, economics conference paper, University of Bonn
- Kostiuk, P.F. (1989). Firm size and executive compensation. *The Journal of Human Resources*; 25:90-105.
- Lambert, R.A., Larcker, D.F. (2001). Contracting theory and accounting. *Journal of Accounting and Economics*; 32 (1-3): 3-87.

- Lambert, R.A., Larcker, D.F., Weigelt, K. (1991). How sensitive is executive compensation to organizational size? *Strategic Management Journal*; 12:395-402.
- Lambert, R.A., Larcker, D.F., Weigelt, K. (1993). The structure of organizational incentives. *Administrative Science Quarterly*; 38:438-461.
- Lawler, E.E. (1971). *Pay and Organizational Effectiveness: A Psychological View*. New York: McGraw-Hill Book Co.
- Leonard, B. (1994). Ceo compensation packages tied to performance. *HR Magazine*:51-52.
- Leonard, J.S. (1990) Executive pay and firm performance. *Industrial and Labor Relations Review*; 43:13-29.
- Leventhal, D. (1988). A survey of agency models of organization. *Journal of Economic Behavior and Organization*; 9:153-185.
- Lewellen, W.G., Huntsman, B. (1970). Managerial pay and corporate performance. *American Economic Review*. 60: 710-720.
- Lewellen, W.G. (1975). Recent evidence on senior executive pay. *National Tax Journal*; 28:159-172.
- Lieberson, S., O'Connor, J.F. (1972). Leadership and organizational performance: A study of large corporations. *American Sociological Review*; 37: 117-130
- Lorsch, J.W. (1995). Empowering the board. *Harvard Business Review*: January-February: 107-117.
- Lowe, K., Milliman, J., De Cieri, H., Dowling, P. (2002). International compensation practices: A ten-country comparative. *Human Resource Management*. 41:1:45-59.
- MacGuire, J., Dow, S. (1998). *Ownership Structure, Executive Compensation and Firm Performance: A Comparison of Canada and the United States*. 1-30.
- Mahoney, T.A. (1979). Organization hierarchy and position worth. *Academy of Management Journal*; 22: 726-737.
- Main, B.G. (1991). Top executive pay and performance. *Managerial and Decision Economics*; 12:219-229.

- Main, B.G., Crystal, G.S. (1988). Ceo compensation as tournament and social comparison: A tale of two theories. *Administrative Science Quarterly*; 33:257-274.
- Mallette, P., Middlemist, R.D., Hopkins, W.E. (1995). Social, political, and economic determinants of chief executive compensation. *Journal of Managerial Issues*; 7:253-276.
- Masson, R.T. (1971). Executive motivation earnings, and consequent equity performance. *The Journal of Political Economy*; 79:1278-1292.
- McEachern, W.A. (1975). *Managerial Control and Performance*. Lexington, Mass.: D.C. Heath Co.
- Milbourn, T. (2003). CEO reputation and stock-based compensation. *The Review of Financial Studies*; 68 (2): 233-262.
- Miller, J., Wiseman, R., Gomez-Mejia, L. (2002). The fit between ceo compensation design and firm risk. *Academy of Management Journal*. 45:4:745-756.
- Moskowitz, G. T. (1998). The effects of performance, risk, human capital, board structure, and nonprofit status on hospital ceo compensation. 1-36.
- Murphy, K.J. (1985). Corporate performance and managerial remuneration. An empirical analysis. *Journal of Accounting and Economics*; 7:11-42.
- Murphy, K.J. (2000). Performance standards in incentive contracts. *Journal of Accounting and Economics*; 30 (3): 245-278.
- Murphy, K.J. (2002). Explaining executive compensation: Managerial power versus the perceived cost of stock options. *The University of Chicago Law Review*. 69:3:847-869.
- Murphy, R. (1999). *A Study of CEO Compensation and Firm Performance Across Companies with High, Medium and Low Managerial Discretion*; Dissertation: Nova Southeastern University.
- Palmer, J. (1973). The profit variability effects of managerial enterprise. *Western Economic Journal*. 2: 228-231.
- Parks, J.M., Conlon, E.J. (1995). Compensation contracts: Do agency theory assumptions predict negotiated agreements? *Academy of Management Journal*; 38:821-838
- Patchen, M. (1959). *Study of Work and Life Satisfaction: Absences and Attitudes Toward Work Experiences*. Ann Arbor: Institute for Social Research.

- Pearce, J.L., Stevenson, W.B., Perry, J.L. (1985). Managerial compensation based on organizational performance: A time series analysis of the effects of merit pay. *Academy of Management Journal*; 28:261-278.
- Pennings, J.M. (1993). Executive reward systems: A cross-national comparison. *Journal of Management Studies*; 30:2:261-280.
- Persons, O. (2001). The relationship between foreign vs. domestic earnings and executive compensation. *The Mid-Atlantic Journal of Business*; 37:123-137.
- Pfeffer, J. (1972). Size and composition of corporate boards of directors: The organization and its environment; *Administrative Science Quarterly*; 17:218-228.
- Pfeffer, J. (1981). Management as symbolic action: The creation and maintenance of organizational paradigms. *Research in Organizational Behavior*; 3:1-52.
- Prasad, S.B. (1974). Top management compensation and corporate performance. *Academy of Management Journal*; 17:554-559.
- Prendergast, C. (2002). The tenuous tradeoff between risk and incentives. *Journal of Political Economy*; 110 (5): 1071-1102.
- Rajagopalan, N., Datta, D.K. (1996). Ceo characteristics: Does industry matter? *Academy of Management Journal*; 39: 197-216.
- Rajagopalan, N.K., Finkelstein, S. (1992). Effects of strategic orientation and environmental change of senior management reward systems. *Strategic Management Journal*; 13:127-142.
- Rajagopalan, N. (1996). Strategic orientations, incentive plan adoptions, and firm performance: Evidence from electric utility firms. *Strategic Management Journal*; 18:761-142.
- Rajagopalan, N., Prescott, J.E. (1990). Determinants of top management compensation: explaining the impact of economic, behavioral, and strategic constructs and the moderating effects of industry. *Journal of Management*; 16:515-538.
- Redling, E.T. (1981). Myth vs. reality: The relationship between top executive pay and corporate performance. *Compensation Review*; 13(4): 16-24.
- Reinhardt, L., Wahba, M. (1975). Expectancy theory as a predictor of work motivation, effort expenditure, and job performance. *Academy of Management Journal*. 18: 520 - 537

- Reinganum, M.R. (1985). The effect of executive succession on stockholder wealth. *Administrative Science Quarterly*; 30:46-60.
- Rhoades, D.L., Rechner, P.L., Sundaramurthy, C. (1998). *A Meta-Analysis of Board Leadership Structure and Financial Performance: Are "Two Heads Better than One"*. 1-20: Boston University:Dissertation.
- Rich, J.T., Larson, J.A. (1984). Why some long term incentives fail. *Compensation Review*. 16(1): 26-37.
- Roberts, D.R. (1959). *Executive Compensation*. Glencoe, Ill.: Free Press
- Roth, K. (1995). Managing international interdependence: Ceo characteristics in a resource based framework. *Academy of Management Journal*; 38:200-231.
- Roth, K., O'Donnell, S. (1996). *Foreign Subsidiary Compensation Strategy: An Agency Theory Perspective*. (Unpublished)
- Rumelt, R.P. (1991). How much does industry matter. *Strategic Management Journal*; 12:167-185.
- Salanick, G.R., Pfeffer, J. (1977). Constraints on administrator discretion. *Urban Affairs Quarterly*; 12: No. 4: 474-498
- Salanick, G.R., Pfeffer, J. (1980). Effects of ownership and performance on executive tenure in u.s. corporations. *Academy of Management Journal*. 23:653-664.
- Saloman, G.L., Smith, E.D. (1979). Corporate control and management misrepresentation of firm performance. *Bell Journal of Economics*. 10:319-328.
- Sanders, W.G. (2001). Behavioral responses of CEOs to stock ownership and stock option pay. *Academy of Management Journal*; 44: 477-492.
- Sanders, W.G., Carpenter, M.A. (1998). Internationalization and firm governance: The roles of ceo compensation, top team composition, and board structure. *Academy of Management Journal*. 41:2:158-178.
- Santerre, R.E., Neun, S.P. (1996). Stock dispersion and executive compensation. *The Review of Economics and Statistics*; 68:685-687.
- Shavell, S. (1979). Risk sharing and incentives in the principal and agent relationship. *The Bell Journal of Economics*; 10:55-73.
- Shivdasani, A., Yermack, D. (1999). CEO involvement in the selection of new board members: An empirical analysis. *Journal of Finance*; 54, 1829-1853.

- Shultz, P.T. (1992). The role of education and human capital in economic development: An empirical assessment. *Conference Paper Economic Growth in the World Economy, Institut fur Weltwirtschaft, Kiel.*
- Sigler, K. (2003). Ceo compensation and healthcare organization performance. *Management Research News. 26:6:31*
- Simon, H.A., (1957). Compensation of executives. *Sociometry; XX: 32-35*
- Singh, H.G., Hatianto, F. (1989). Top management tenure;, Corporate ownership structure and the magnitude of golden parachutes. *Strategic Management Journal; 10:143-156.*
- Snow, C.C., Thomas, J.B. (1994). Field research methods in strategic management: contributions to theory building and testing. *Journal of Management Studies; 31:547-480.*
- Taussig, F.W., Barker, W.S. (1925). American corporations and their executives: A statistical inquiry. *Quarterly Journal of Economics; 40: 1-51*
- Tosi, H.L., Gomez-Mejia, L.R. (1989). The decoupling of ceo pay and performance: An agency theory perspective. *Administrative Science Quarterly; 34:169-189.*
- Tosi, H.L., Gomez-Mejia, L.R. (1994). Ceo compensation monitoring and firm performance. *Academy of Management Journal: 37:1002-1016.*
- Tosi, H.L., Katz, J.P., Gomez-Mejia, L.R. (1997). Desegregating the agency contract: The effects of monitoring, incentive alignment, and term in office on agent decision making. *The Academy of Management Journal; 40: 584-602.*
- Tosi, H.L., Katz, J.P., Gomez-Mejia, L.R. (1998). A meta-analysis of executive compensation studies. University of Florida at Gainesville: non-published manuscript.
- Tosi, H.L., Werner, S. (1995). Managerial discretion and the design of compensation strategy. *Academy of Management Journal; 40:584-602.*
- Veliyath, R., Bishop, J.W. (1995). Relationship between ceo compensation and firm performance: Empirical evidence of labor market norms. *The International Journal of Organizational Analysis; 3:268-283*
- Venkatraman, N., Grant, J.H. (1996). Construct measurement in organizational strategy research: A critique and proposal. *Academy of Management Review; 11:71-87.*
- Vroom, V.H. (1964). *Work and Motivation.* New York, Wiley.

- Walker, D. (2002). Managerial power and rent extraction in the design of executive compensation. *University of Chicago Law Review*; 69:3, 751-846.
- Wallace, Jr.M.J. (1973). Executive compensation: Two determinants. *Compensation Review*; 5:18-23.
- Walters, B., Hardin, T., Shick, J. (1995). Top executive compensation: Equity or excess? implications for regaining american competitiveness. *Journal of Business Ethics*; 14:227-234.
- Weisbach, M.S. (1987). Outside directors and ceo turnover. *Journal of Financial Economics*; 20:431-460
- Werner, S., Tosi, H.L. (1995). Other people's money: The effects of ownership on compensation strategy and managerial pay. *Academy of Management Journal*; 38;1-19.
- Westphal, J.D., Azjac, E.J. (1994). Substance and symbolism in ceo's long-term incentive plans. *Administrative Science Quarterly*; 39:367-390.
- Westphal, J.D., Zajac, E.J. (1995). Who shall govern? Ceo board power, demographic similarity, and new director selection. *Administrative Science Quarterly*; 40:60-83
- Westphal, J.D., Zajac, E.J. (1997). Defections from the inner circle: Social exchange, reciprocity, and the diffusion of board independence in u.s. corporations. *Administrative Science Quarterly*; 42;161-183.
- Williamson, O.E. (1964). *The Economics of Discretionary Behavior: Managerial Objectives in a Theory of the firm*. Englewood Cliffs, N.J.: Prentice-Hall.
- Wright, P., Kroll, M. (2002). Executive discretion and corporate performance as determinants of ceo compensation, Contingent on external monitoring activities. *Journal of Management and Governance*; 6: 189-214.
- Young, M., Buchholtz, A. (2002). Firm performance and ceo pay: Relational demography as a moderator. *Journal of Managerial Issues*. 14:3:296-313.
- Zajac, E.J. (1990). Ceo selection, succession, compensation and firm performance: A theoretical integration and empirical analysis. *Strategic Management Journal*; 11:217-230.
- Zajac, E.J., Westpahl, J.D, (1988). Interlocking directorates as an inter-organizational strategy: A test of critical assumptions. *Academy of Management Journal*; 31:428-438.

- Zajac, E.J., Westphal, J.D. (1994). The costs and benefits of managerial incentives and monitoring in large u.s. corporations: When is more not better? *Strategic Management Journal*; 15:121-142.
- Zajac, E.J., Westphal, J.D. (1996). Director reputation, ceo board power, and the dynamics of board interlocks. *Administrative Science Quarterly*; 41:507-529.
- Zaleznik, A., Christensen, C.R. (1958). *The Motivation, Productivity and Satisfaction of Workers*. Boston: Harvard University Graduate School of Business Administration