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PROXY CONTESTS FOR CONTROL: THEIR IMPLICATIONS FOR CORPORATE BEHAVIOR

City University of New York PH.D. 1981

PROXY CONTESTS FOR CONTROL: THEIR IMPLICATIONS FOR CORPORATE BEHAVIOR

by

ALAN NORMAN MILLER

A dissertation submitted to the Graduate Faculty in Business in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York.

1981

This manuscript has been read and accepted for the Graduate Faculty in Business in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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Abstract

PROXY CONTESTS FOR CONTROL: THEIR IMPLICATIONS FOR CORPORATE BEHAVIOR

by

Alan Norman Miller

Adviser: Professor Mahmoud A. Wahba

Proxy voting is the dominant mode of shareholder decision making in publicly held corporations. Shareholders use proxies to vote on a variety of corporate matters including the election of directors.

Proxy contests between incumbent management and discontented shareholders occur regularly. A proxy contest for control is an attempt by dissident shareholders to obtain enough proxies to elect their candidates to a majority of the positions on a corporation's board.

At present there is no unified explanation of what type of corporations have successful or unsuccessful proxy contests for control and no explanation of how the behavior of firms is related to the occurrence of these phenomena. The purpose of this dissertation is to develop a theory of proxy contests in order to provide these explanations. In doing so, the dissertation evaluates the validity of the theory of the firm (and, in particular, its assumption of profit maximization) and the validity of the Baumol and Blinder theory that the stock market, through its stock pricing process, encourages managements to use their corporations' assets efficiently.

Sixteen hypotheses relating to 16 financial and structural characteristics of corporations are tested. Data regarding these financial and structural characteristics were obtained from 93 publicly traded corporations in various industries which have had a successful or an unsuccessful proxy contest for control between 1964-1978.

Univariate statistical techniques are used to distinguish between corporations which have had a successful and corporations which have had an unsuccessful control contest on the basis of a single financial or structural characteristic. Stepwise discriminant analysis is used to identify those continuous variables which maximally separate the two groups of firms.

The results of the univariate analysis reveal that: (1) the only variables which distinguish between the two groups of firms at the $\rho \leq .05$ level of significance are percentage of management and director ownership of common stock and domestic corporation and (2) there is a significant difference ($\rho < .02$) between the number of domestic and the number of multinational corporations which have had a successful control contest.

The results of the stepwise analysis reveal that two discriminant functions can be used to predict categorical group membership. The first function, which contains three continuous variables, can optimally be used to classify corporations which have had an unsuccessful proxy contest for control. The order of entry of each variable into this function (and each variable's consequent

discriminatory power) is: (1) rate of return on assets, (2) rate of return on equity, and (3) percentage of management and director ownership of common stock. The second discriminant function can optimally be used to classify corporations which have had a successful control contest. The variables contained in this function and their order of entry are: (1) percentage of management and director ownership of common stock, (2) rate of return on equity, (3) number of corporate offices, plants, and/or subsidiaries located outside the United States, and (4) rate of return on assets.

Using ANOVA to compare measures of profitability and of common stock prices in corporations which have had a successful control contest, an unsuccessful control contest, or no proxy contest reveals that each measure is greater in corporations which have not had a proxy contest. These findings constitute moderate support for the profit maximization assumption of the theory of the firm and for the theory of stock market discipline.

Further exploration of the differences between corporations which have had a successful or an unsuccessful proxy contest for control and relating these findings to applied settings are some areas for future research.

Acknowledgements

I am grateful to my dissertation committee--Professor Mahmoud A. Wahba (Chairman), Professor Sidney I. Lirtzman, and Professor H. Jack Shapiro--for their expert guidance throughout this research. I would also like to acknowledge Professor William J. Corney for providing statistical advice.

Finally, I want to express my profound gratitude to my wife, Cheryl Goldfarb Miller, whose unselfish support and constant love made it possible for me to complete this research.

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PROXY CONTESTS FOR CONTROL: THEIR IMPLICATIONS FOR CORPORATE BEHAVIOR

CHAPTER I

INTRODUCTION AND LITERATURE REVIEW

As originally conceived the corporate form of business organization was to be managed by its owners. Although this ideal was possible in simple, compact societies, it became unattainable as shareholders increased in number and became geographically dispersed. With the emergence of the widespread divorce of ownership from management[1] there developed a need to give shareholders a voice in regulating the affairs of their corporations. The mechanism which was created to satisfy this need is a governing body known as the board of directors.

"The board of directors is, by definition, the top-level policy formulating body in a corporation. As such, the board is situated at the pinnacle of the corporate structure and is ultimately responsible for controlling and maintaining organizational operation and effectiveness" (Miller, 1978, pp. 1-2). Although the precise date of its origin is unknown, the board of directors has constituted a fundamental component of organizations for centuries (Kreps, 1976; Lundgren, 1974). In the United States the general incorporation laws which were originally enacted by each of the states during the 19th century (and which are similar in all states) require that the business and affairs

of every corporation must be managed by a board of directors (Mace, 1971, 1972; Miner, 1978; Nader, Green & Seligman, 1976b).[2]

State corporation laws provide shareholders with the exclusive power to nominate and elect members of the board of directors at a shareholders' meeting (Eisenberg, 1970; Seligman, 1976). Statutory requirements and the by-laws of almost every corporation or their certificate of incorporation mandate that the shareholders' meeting be held annually (Aranow & Einhorn, 1968). Corporations are generally allowed to select the time and place of their annual meeting, although some state corporate laws specify when these meetings must be held (Aranow & Einhorn, 1968). It is typical for corporations to schedule their annual meetings in the spring so that stockholders will have an adequate opportunity to review the preceding year's annual report. Delaware's General Corporation Law typifies the statutes enacted by most states with regard to annual meetings. This law requires that: (1) an annual meeting of stockholders must be held for the election of directors at a time and date designated in a corporation's by-laws and (2) shareholders must receive written notice of the time, date, and place of the annual meeting not less than 10 or more than 60 days before the date of the meeting (Delaware Rev. Code, 1974).

A shareholder generally receives one vote for each share of common stock he or she owns, and board members are elected by a majority of the common stock voted (Delaware Rev. Code, 1974; Wattel, 1966). In states where cumulative voting is permitted each shareholder is entitled to cast a number of votes equal to the number of

his or her shares multiplied by the number of directors to be elected. A shareholder may either give all his or her votes to one candidate or may divide them among several candidates. The difference between cumulative and noncumulative voting is illustrated in Footnote 3.

"In the election of the board the stockholder ordinarily has three alternatives. He can refrain from voting, he can attend the annual meeting and personally vote his stock, or he can sign a proxy [power of attorney] transferring his voting power [either] to certain individuals selected by the management of the corporation, the proxy committee" (Berle & Means, 1932, p. 86) or to a stockholders committee. A stockholders committee is a group of shareholders who do not endorse the candidates for directorships which the management appointed proxy committee has nominated. The stockholders committee nominates its own slate of candidates who run in opposition to the proxy committee's candidates.

Since annual meetings are seldom attended by shareholders (Nader, Green, & Seligman, 1976a, 1976b; Seligman, 1978),[4]

> proxy voting has become the dominant mode of shareholder decision making in publicly held corporations. There are a number of reasons for this. Shareholders in such corporations are often geographically dispersed, so that a given shareholder may not live near the site of the meeting. Shareholders often have some principal business other than investing, so that a given shareholding may not represent a substantial proportion of a shareholder's total wealth. And whether a shareholder supports or opposes the matters scheduled for action at a meeting, he may not wish to speak on the issues. Physical attendance at a shareholders' meeting is normally an uneconomical use of a shareholder's time when he can vote by proxy. (Eisenberg, 1970, pp. 1490-1491)

In addition to the election directors, stockholders may use proxies to vote on a variety of corporate matters, including acquisitions, amendments to charters and by-laws, approval or selection by management of independent auditors, authorizations of new or additional securities, bonus or profit sharing plans, consolidations, deferred compensation arrangements, employee pension and retirement plans, mergers, modifications of existing securities, recapitalization plans, sale of assets and dissolution of the firm, stock option plans, etc. (Annual Report of the SEC, 1976).

Before a corporation's annual meeting those who are soliciting proxies mail each stockholder a notice announcing the meeting's date, time, and location; a proxy statement; a proxy form; and a return envelope. The proxy statement is the primary written source of information stockholders receive regarding the matters to be voted upon at the annual meeting. If directors are being elected, the proxy statement provides information about each candidate's employment background, previous service as a director, stockholdings in the corporation, compensation, benefits, etc. (Aranow & Einhorn, 1968). Sometimes the proxy statement serves as a campaign instrument whose purpose is to persuade stockholders to execute their proxies for either management or nonmanagement.

Prior to 1934 proxy solicitations were regulated solely by the charter and by-laws of individual corporations. In 1934 federal regulation of proxy solicitations was established by enactment of the Securities and Exchange Act (Aranow & Einhorn, 1978; Broehl, 1955).

The Securities and Exchange Commission's (SEC's) proxy rules "do not extend to all proxy solicitations, but only those in respect to certain securities--generally speaking, securities which are either listed on a national securities exchange, or are equity securities issued by a corporation with assets of more than one million dollars and held by 500 or more shareholders" (Eisenberg, 1970, p. 1493). If a proxy solicitation is subject to the SEC's proxy rules, then both the proxy statement and the proxy form must conform to a number of specific requirements. The purpose of these requirements is to ensure that stockholders receive accurate and complete information so they can make an informed decision regarding the execution of their proxies. Table 1 presents a simplified illustration of a proxy form which conforms to the SEC's requirements. Copies of proposed proxy material must be filed with the SEC in preliminary form prior to the date of the proposed solicitation. The period from March through May is frequently referred to as the "proxy season" because approximately two thirds of all the proxy material which is submitted to the SEC is filed during this time (Whetten, 1959). "Where preliminary material fails to meet the prescribed disclosure standards, the management or other group responsible for its preparation is notified informally and given an opportunity to correct the deficiencies in the preparation of the definitive proxy material to be furnished to security holders" (Annual Report of the SEC, 1976, p. 62). If the SEC is unable to secure compliance with its proxy rules through the use of this informal procedure, it can

Table 1

Proxy Form

The Smith Jones Company

Proxy Solicited by the Management

The undersigned hereby constitutes and appoints John Doe, Richard Roe, and Henry Hoe, or any one or more of them acting in the absence of others, with full power of substitution, the true and lawful attorneys and proxies of the undersigned, to attend the Annual Meeting of the Stockholders of The Smith Jones Company to be held at Suite 1500, 285 Madison Avenue, in the Borough of Manhattan, City and State of New York on March 5, 1979, at 2:00 P.M. local time and any adjournments thereof, and to vote the shares of said corporation standing in the name of the undersigned with all the powers the undersigned would possess if personally present at such meeting:

(1) For ( ) Do not vote for ( ) the election of directors.

(2) For ( ) or Against ( ) the proposal to increase the authorized common stock of the Company from 2,000,000 to 3,000,000 shares. (Management recommends a vote "FOR" this proposal.)

If no specific direction is given, this proxy will be voted for the election of directors and for the proposal.

Dated_____1979

_____

Signature

Table 1--Continued

Joseph J. Black 50 Fifth Avenue New York, New York 10009	Please sign exactly as name appears to the left. When signing as executor, administrator, attorney, trustee, or guardian, please give full title as such. If a corporation, please sign in full corporate name by president or other authorized officer. If a partnership, please sign in partnership name by authorized person.

No postage is required if returned in the enclosed envelope and mailed in the United States.

Stockholders who are present at the meeting may withdraw their proxy and vote in person if they so desire.

Adapted from: Aranow, E. R., & Einhorn, H. A. Proxy contests for corporate control. (New York: Columbia University Press, 1968).

resort to court action.[5]

A particularly significant phenomenon in the corporate voting process is the proxy contest. (The terms proxy battle and proxy fight are synonymous with proxy contest.) The proxy contest is the stockholders' most potent weapon for instituting a change in corporate management. When a group of stockholders is profoundly dissatisfied with an incumbent management's policies it may seek to change those policies by nominating its own slate of candidates for election to the board of directors. The ensuing competition between the incumbent management and the group of discontented stockholders to solicit enough proxies to elect their respective candidates is commonly known as a proxy contest. If the candidates who oppose management are successful in being elected to the board, they may be able to use their power as directors to replace senior management officials and/or to amend management's policies.

The actual number of proxy contests which occur in any year is impossible to calculate. Information about proxy contests is generally unattainable from corporations that are not subject to the SEC's proxy rules. However, Table 2 shows that during the years 1956-1977: (1) proxy contests in corporations which were subject to the SEC's proxy rules occurred regularly, averaging about 25 contests per year; (2) the annual percentage of proxy contests in these corporations averaged about .8; (3) the number of proxy contests varied nearly every year and did not appear to follow a discernible pattern; (4) there are two types of proxy contests, contests for representation

Table 2

Proxy Contests in Corporations Subject to the SEC's Proxy Rules, 1956-1977

Fiscal Year (July 1-June 30)	Total No. of Corps. Subject to the SEC's Proxy Rules	Total No. of Proxy Contests	Per Cent of Elections in which Mgt's. Slate was Unopposed	No. of Contests for Representation	No. of Contests for Control
1956	1,705	17	99.0	9	8
1957	1,726	20	98.8	9	11
1958	1,780	34	98.1	12	22
1959	1,790	19	98.9	8	11
1960	1,864	25	98.7	9	16
1961	1,680	32	98.1	12	20
1962	1,807	17	99.1	7	10
1963	2,205	27	98.8	9	18
1964	2,274	18	99.2	6	12
1965	2,391	26	98.9	10	16
1966	3,632	37	99.0	13	24
1967	4,370	37	99.2	19	18
1968	4,473	27	99.4	6	21
1969	4,548	25	99.5	5	20
1970	5,095	24	99.5	4	20
1971	5,864	31	99.5	9	22

Table 2--Continued

Fiscal Year (July 1-June 30)	Total No. of Corps. Subject to the SEC's Proxy Rules	Total No. of Proxy Contests	Per Cent of Elections in which Mgt's. Slate was Unopposed	No. of Contests for Representation	No. of Contests for Control
1972	6,328	23	99.6	7	16
1973	6,744	23	99.7	5	18
1974	6,757	15	99.8	1	14
1975	6,826	25	99.6	5	20
1976	6,898	18	99.7	3	15
1977	6,949	37	99.5	11	26
Total		557		179	378
Mean		25.3	99.2	8.1	17.2
Median		25.0	99.2	8.5	18.0
Range		15-37	98.1-99.8	1-19	8-26
SD		6.7	.47	3.8	4.7

Sources: 22nd - 43rd Annual Reports of the Securities and Exchange Commission. Washington, D.C.: U.S. Government Printing Office, 1956-1977.

and contests for control; and (5) contests for control occurred significantly more often ($t = 6.87$, $df = 42$, $p<.001$) than contests for representation.

A proxy contest for representation is defined as an attempt to win a minority (less than 50 per cent) of the directorships on a corporation's board. A proxy contest for control is defined as an attempt to win a majority (more than 50 per cent) of the directorships on a corporation's board (Austin, 1965). In each type of contest stockholders are confronted with a choice between two or more slates of candidates (Broehl, 1955). Table 3 presents a sample ballot form which is designed for use in proxy contests conducted under the SEC's proxy rules.

Although the average number of proxy contests which occur each year is only 25, these phenomena constitute an important subject of investigation and exposition for corporate scholars (e.g., Austin, 1964, 1965; Wattel, 1966; Whetten, 1957, 1959), attorneys and other corporate consultants (e.g., Aranow & Einhorn, 1968; Eisenberg, 1970; Karen, 1976), social activists (e.g., Nader, Green, & Seligman, 1976a, 1976b; Seligman, 1978; Weiss, 1974), the United States Congress (1956), the Securities and Exchange Commission (e.g., 22nd - 43rd Annual Reports of the SEC, 1956-1977), and the popular and trade press (e.g., Braodcasting, 1971a, 1971b, 1972; Business Week, 1971, 1972a, 1972b, 1973, 1974, 1978a, 1978b, 1978c; Cole, 1978a, 1978b; Fortune, 1978; Karr, 1956; New York Times, 1967, 1978; Nation's Business, 1971; Walker, 1967; Wall Street Journal, 1975, 1978a, 1978b, 1978c).

Table 3

Ballot Form

ABC Corporation

Annual Meeting of Stockholders

May 10, 1979

I (we)[a] hereby vote_____ shares for the election of the following persons as directors of the Corporation (vote for five):

( )		( )	
( )	(Names of Manage-	( )	(Names of Opposi-
( )	ment Nominees)	( )	tion Nominees)
( )		( )	
( )		( )	

I (we) hereby vote:

(1) _____ For

_____ Against

The resolution to amend the Certificate of Incorporation to increase the authorized capital stock of the Corporation to 3,000,000 shares of common stock.

Table 3--Continued

(2) _____ For _____ Against	The resolution approving the grant of restricted stock option to the President and to the Chairman of the Board of Directors of the Corporation.	
Dated: New York, New York May 10, 1979		Per Proxies Filed _____ _____ (Proxy Agents)

[a]"I" is appropriate for use by individual and "we" in case of multiple stockholders or proxy agents.

Adapted from: Aranow, E. R., & Einhorn, H. A. Proxy contests for corporate control. (New York: Columbia University Press, 1968).

The reasons for the widespread interest in proxy contests include their direct and indirect financial effects on corporations, stockholders, and local and national economies; their impact on the tenure of corporate managements; and their relevance for corporate democracy.

Wattel (1966) suggests that there are a number of key indicators which signal the start of a proxy contest. These indicators are: (1) a rapid rise in the price of a corporation's stock, (2) an increase in the volume of corporate stock being traded, and (3) an increase in the amount of stock being held in "street" names. (According to Metcalf and Reinemer, 1971, the beneficial owners of stock can have the name of their stock broker or brokerage firm listed as the owner of record. This is often done by the beneficial owners of large amounts of stock who wish to conceal their identity. In such situations the stock is said to be held in "street" names.)

Austin (1964, 1965), Wattel (1966), and Whetten (1957, 1959) have found that proxy contests are caused by a variety of factors, including poor operating performance (general inefficiency and stagnant growth), the absence of or low dividends, the market value of a corporation's common stock being lower than its bookvalue, stockholders' dissatisfaction with excessive executive salaries and benefits, poor management-stockholder relations, insurgents' desire to obtain top management positions in a corporation, stockholder disagreement with management's policies, discovery of illegal and/or

self serving activities by management, and stockholder's belief that a board which consists of a majority of inside directors cannot properly protect their interests.

One empirical study of 67 companies which had proxy contests between 1956-1960 found that: (1) these contests often had multiple causes, (2) financial causes where considerably more important than social causes, and (3) poor operating performance was the single most important financial cause (Austin, 1964, 1965). This and other investigations (Aranow & Einhorn, 1968; Whetten, 1959) also concluded that cumulative voting increases the likelihood of a proxy contest. In corporations which allow cumulative voting, insurgents can easily gain representation on the board by attaining ample support through stockholder solicitation or by direct ownership of sufficient stock.

The empirical evidence regarding the effects of proxy contests on corporate functioning is scarce and inconclusive. Based on his research Austin (1964, 1965) concluded that: (1) a firm's efficiency is increased by having undergone a successful proxy contest for either control or representation and (2) companies which have undergone successful control contests perform more favorably than firms which have undergone successful representation contests. On the other hand, Wattel (1966) found that corporations which have had a successful control contest do not perform significantly better (according to a number of economic and financial measures) after the contest than before.

It has been discovered that either unsuccessful or threatened

proxy contests may affect the composition of a corporation's board of directors. Aranow and Einhorn, (1968), Austin (1965), Blumberg (1973), and Perham (1979) found that the management of some corporations nominates activist and/or major shareholders for directorships in order to prevent the occurrence or recurrence of a proxy contest. Election of these candidates generally assuages discontented stockholders. Even if activist or major shareholders are not elected to the board, management may modify corporate operations in order to preclude future proxy contests (Schwab, 1979).

Seligman's (1978) research reveals that the cost of proxy contests is very high, especially when compared to uncontested proxy solicitations (see Tables 4 and 5). Those who advocate corporate change believe that the cost of financing one or more candidates to oppose a management backed slate is an insurmountable barrier for most insurgent groups and is the primary reason for the paucity of proxy contests (Nader, Green, & Seligman, 1976a, 1976b; Seligman, 1978). Contributing to the financial obstacle are the following: (1) insurgents must pay their own campaign expenses, with the possibility of reimbursement (from corporate funds) existing only if they are successful; (2) management backed candidates have virtually unlimited exclusive access, without cost, to corporate resources (such as personnel, reproduction equipment, office supplies, postage, telephones, etc.) to promote their campaigns; and (3) inflation continues to increase the cost of undertaking a proxy contest (Aranow & Einhorn, 1968; Broehl, 1955; Nader, Green, & Seligman,

Table 4

Cost of Proxy Contests in Some Corporations

Corporation	Date of Contest	No. of Share-holders	Manage-ment's Expenses	Cost per Share-holder	Insur-gents' Expenses	Cost per Share-holder
Thompson-Starret	1947	6,800	$20,110	$ 2.98	$ 25,755	$ 3.79
Fairchild Engine & Airplane	1949	10,400	$133,966	$12.68	$127,556	$12.27
Sparks-Withington	1950	8,500	$ 51,105	$ 6.01	$ 6,000	$ .71
United Cigar-Whelan Stores	1951	16,000	$ 60,159	$ 3.76	$ 30,534	$ 1.91
New York Central Railroad	1954	41,000	$875,000	$21.34	$1,308,733	$31.92
New York, New Haven & Hartford Railroad	1954	5,100	$ 94,321	$18.49	$ 94,834	$18.59

Table 4--Continued

Corporation	Date of Contest	No. of Shareholders	Management's Expenses	Cost per Shareholder	Insurgents' Expenses	Cost per Shareholder
U.S. Smelting,						
Refining, & Mining	1963	2,782	$231,388	$83.17	----	----
Republic	1964	7,078	$257,000	$36.30	$365,215	$51.60
MGM	1967	12,654	$125,000	$ 9.88	$175,000	$13.83
Mean			$205,339	$21.62	$266,703	$16.83
Median			$125,000	$12.68	$111,195	$13.05

Source: Seligman, J. The Securities and Exchange Commission and Corporate Democracy, University of Dayton Law Review, 1978, 3(1), 1-21.

Table 5

Cost of Uncontested Proxy Solicitations in Some Corporations

Corporation	Cost of Proxy Solicitation[a]	Number of Shareholders	Cost per Shareholder
Allegheny	$ 12,000	29,000	$ .41
Chrysler	$170,000	230,000	$ .74
Coca-Cola	$ 46,300	67,000	$ .69
Exxon	$500,000	700,000	$ .71
ITT	$250,000	238,000	$1.05
Marriott	$ 20,000	42,000	$ .48
Mobile	$158,000	227,000	$ .69
U.S. Steel	$117,000	250,000	$ .47
Washington Post	$ 6,000	2,000	$3.00
Xerox	$140,000	140,000	$1.00
Mean	$141,930		$ .92
Median	$128,500		$ .73

[a]In each instance the cost refers to either the 1975 or 1976 annual proxy solicitation.

Source: Seligman, J. The Securities and Exchange Commission and Corporate Democracy, University of Dayton Law Review, 1978, 3(1), 1-21.

1976a, 1976b; Seligman, 1978).

Purpose of the Study

Despite the importance of and widespread interest in proxy contests, research on this subject is primarily descriptive and nontheoretical. The literature does not contain a formal theory of proxy contests. There is no unified explanation of what kind of corporations have successful or unsuccessful contests and no explanation of how the behavior of firms is related to the occurrence of these phenomena. Furthermore, the complete absence of hypothesis testing studies and the persistent use of small samples, case studies, and nonrigorous, intuitive methods to analyze data bring into question the validity and generalizability of the extant research.

Given the dearth of sophisticated empirical research pertaining to proxy contests, it is important to fill this void. The purpose of this dissertation is, therefore, to empirically examine the salient financial and structural characteristics of corporations which have had successful or unsuccessful proxy contests for control of their boards of directors and to relate these characteristics to a theoretical framework. This framework will attempt to explain what kind of corporations have successful or unsuccessful control contests and explain how the behavior of individual firms is related to the occurrence of these contests.

In essence, this study will try to systematically answer the following questions. What are the important financial and structural characteristics of corporations which have had a successful control

contest? How are these characteristics different from those of companies which have had an unsuccessful contest? Is it possible to identify specific financial and structural characteristics which may make a firm more likely to have a successful or an unsuccessful control contest?

The answers to these and other related questions will be used to construct a theoretical framework. They may also provide practicing managers with useful information for establishing corporate policies, objectives, and structures which produce greater stockholder satisfaction and, thereby, preclude control contests. Diminution of these contests will significantly reduce corporate proxy solicitation expenditures. Capital saved in this area may be used more productively by managers.

Students of business should also be interested in an investigation of this type because of its relevance to: (1) the long-standing debate regarding the profit maximization assumption of the theory of the firm and (2) determining how well the stock market encourages corporate managements to use the existing assets of their organizations most efficiently. The significance of these topics will be discussed in the following chapter.

Limitations of the Study

Only corporations which have had proxy contests for control are investigated in this study. Representation contests are not considered because of their relative infrequency and the often ephemeral nature of their effects.

The only corporations included in this study are those: (1) which could be identified in public sources as having had a proxy contest for control with a definitive result during the period 1964-1978, (2) which were traded on a securities market in the United States during the year of and the three years preceding their control contest, and (3) for which adequate data regarding their financial and structural characteristics could be found.

Although many organizations operate in industries in which government regulations control the price they can charge for their goods and services, this study does not consider the effect these or other regulations have upon control contests. This limitation is discussed in more detail at the end of Chapter II.

Finally, additional limitations of this study are discussed in Chapter II under the heading "Qualifications."

FOOTNOTES - CHAPTER I

[1]There is a longstanding controversy among corporate scholars regarding the validity of the view that the diffusion of ownership in large corporations among numerous stockholders has resulted in the separation of ownership and control. Scholars whose research supports this view (which is sometimes called the theory of managerial capitalism) include Berle (1954), Berle and Means (1932), Dahrendorf (1959), Galbraith (1971), Gordon (1966), Larner (1966), Parsons (1953), and Parsons and Smelser (1957). Some of those whose research does not support this view are Burch (1972), Chevalier (1969), Knowles (1973), Lundberg (1946), Patman Staff Report (1968), Perlo (1957), Rochester (1936), Sheehan (1966, 1967), and Sweezy (1953).

[2]Empirical research has revealed that the traditional functions of the board of directors (which were posited by several management theorists, including Baker, 1945 and Copeland & Towl, 1947) are seldom performed, except in those cases where directors either own or represent the ownership of a significant amount of stock in a corporation. Rather, investigators have discovered that the primary functions of the board are: (1) providing advice and counsel to the corporation's president (CEO), (2) serving as a discipline for the corporation's senior management, (3) selecting a new president (CEO) in the event of his or her sudden death (providing the president or CEO has not already designated a successor), (4) replacing the president (CEO) if his or her performance is overwhelmingly unsatisfactory, and (5) approving major corporate financial decisions (Clendenin, 1972; Koontz, 1967; Mace, 1971, 1972; Louden, 1975).

[3]Illustration of the difference between cumulative and noncumulative voting:

> Assume there exists a corporation with 10,000 shares of stock outstanding. Control of the stock is divided, 6,500 shares for management and 3,500 shares for an insurgent stockholder's committee. Five directors are to be elected, and each group has nominated five candidates. Under noncumulative voting, the management could cast 6,500 votes each for its five candidates and the insurgents could cast 3,500 votes for each of its candidates. All five of the management nominees would be elected. Now, if cumulative voting was permitted, management would have 32,500 votes (6,500 X 5) and the insurgents would have 17,500 votes (3,500 X 5). If each faction cumulated its votes properly, management should elect only three of its nominees and the insurgents should elect two of its nominees (as is shown in the following table), thereby securing minority representation on the board of directors. (Aranow & Einhorn, 1968, p. 331):

	Total Votes	Management's Nominees (A-E)				
		A	B	C	D	E
Management	32,500	10,835	10,833	10,832		

	Total Votes	Insurgents' Nominees (F-J)				
		F	G	H	I	J
Insurgents	17,500	8,751	8,749			

For a complete discussion of the mathematics of cumulative voting, when cumulative voting may be used, and the possible dangers in the use of cumulative voting see Aranow and Einhorn (1968), pp. 332-347.

[4]For example, only 25 out of approximately 60,000 shareholders attended the 1974 annual meeting of the Bristol Meyers Corporation; at Cities Service, with approximately 135,000 shareholders, 25 attended the 1974 annual meeting; at the Coca-Cola Company 25 of approximately 70,000 shareholders attended the meeting; and at the El Paso Natural Gas Company, with approximately 125,000 shareholders, 50 attended (Nader, Green, & Seligman, 1976a, 1976b; Seligman, 1978).

[5]For a more comprehensive description of the history and applicability of the SEC's proxy rules see Aranow and Einhorn (1968), pp. 91-112. For more information regarding the SEC's filing requirements and the methods the SEC uses to enforce its proxy rules see Aranow and Einhorn (1968), pp. 112-146 and pp. 450-462, respectively.

CHAPTER II

THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

Control Contests and the Profit Maximization Assumption of the Theory of the Firm

Classical economists (e.g., Ricardo, 1911 and Smith, 1905) were primarily concerned with the operation of the economy as a whole. They tried to identify the causes of a nation's wealth and they were interested in the distribution of the nation's total output to its factors of production. However, beginning with the neoclassical economists of the late nineteenth-early twentieth century there was a change in emphasis. These economists were interested in understanding the economic decision making behavior of individual units (such as the consumer and the firm) within the economy.

Although it was formulated by neoclassical economists, the theory of the firm had its antecedents in the classical work of Cournot (1838). Since Cournot's work had relatively little influence "in his own day, we may perhaps date the introduction of the theory of the firm into the main stream of economic thought a generation or more later, with the 'discovery' of Cournot by Jevons and the explicit development of the theory of maximizing behavior by Edgeworth and Marshall. It took another generation and a half until the marginal analysis was fully and explicitly developed by Harrod, Joan Robinson, and Chamberlin round about 1930" (Boulding & Spivey, 1960, p. 2).

The theory of the firm is based on a number of assumptions,

including: (1) firms may produce whatever products and/or services they wish, without restriction; (2) firms organize factors of production in a least-cost combination; and (3) firms attempt to maximize profits. The paramount and most controversial assumption of the theory is profit maximization.

According to Boulding and Spivey (1960),

> the firm is thought of essentially as an input-output process, whereby certain inputs of factors of production--labor and land services, capital services, raw materials, and so on--are transferred into outputs on salable products. Inputs are generally bought, outputs are generally sold...Because of their explicit or implicit market prices, however, inputs and outputs can be valued--that is, expressed as a sum of "dollars worth" or of any other convenient measure of value. Costs are then the value of input, revenues the value of output, and corresponding to the process of transforming inputs into outputs there is a corresponding process of transforming costs into revenues. The excess of revenues over costs is the net revenue, which is taken as a measure of profit...The optimum position of the firm is...defined as that position out of the set of all possible positions for which the net revenue is a maximum. (pp.2-3)

Over the years there has been a continuing debate (primarily among economists) about the validity of the neoclassical theory of the firm. The central issue in this debate is the theory's assumption that the most important concern of corporate management is to maximize profits. Some of those who disagree with this assumption contend that managers of corporations which are characterized by a divorce of ownership from control are more interested in maximizing their company's rate of growth than in maximizing its profits (Galbraith, 1971; Marris, 1964). Their explanation for this behavior

is that the goals of managers (e.g., higher salaries, increased power, greater prestige, etc.) are more closely related to the size of a corporation than to its profitability. Others who disagree with the profit maximization assumption (e.g., Baumol, 1967) note that because managerial incentives are more often tied to increasing total sales rather than profits, revenue maximizing is considerably more important to managers than profit maximizing. Still others who voice disagreement (e.g., Tintner, 1941a, 1941b) maintain that most managers are not concerned with maximizing profits since it is impossible to do so under conditions of uncertainty. Accordingly, it has been suggested that firms "satisfice" rather than maximize profits because the calculations required to maximize profits are too complicated and the data available are insufficient (Simon, 1957, 1979). Another point of view, expressed by Van Horne (1971), is that management's objective is to maximize the value of the firm, and that maximizing value is not the same as maximizing earnings. Van Horne believes that value is represented by the market price of a company's common stock, which is dependent upon management's investment, financing, and dividend decisions, the company's history, and the type of industry the firm is in.

In defense of the profit maximization assumption several economists (e.g., Alchian, 1950; Becker, 1962; Friedman, 1953) have argued that competition and other forces in the external environment of all corporations require them to be profit maximizers in order to survive, whatever the inclinations of corporate management.

Furthermore, these economists note that no alternative assumption has been as successful as profit maximization in predicting the behavior of firms.

The following statement by Lipsey and Steiner (1972) provides a more complete rationale for the profit maximization assumption:

> It is assumed that the firm maximizes its profits...You may well ask if it is sensible to build an elaborate theory based on such a crude assumption about the motives of businessmen. It is well known that some businessmen are inspired by motives other than an overwhelming desire to make as much money as possible...Should it not be said that many motives affect business decisions and that a much richer theory than simple profit maximization is necessary to handle so complex a problem as business decisions?
>
> The real world is complex. A theory concentrates on certain factors and deals with them on the assumption that they are important ones and that those ignored are relatively less important. If it is true that the key factors have been included, then the theory will be successful in predicting what will happen in the real world under specified circumstances. That a theory ignores some factors known to be present in the world says nothing more than that the theory is a theory and not just a photographic reproduction of reality. If the theory has ignored some really important factors, its predictions will be contradicted by the evidence, at least in those situations in which a factor ignored is quantitatively important.
>
> How does this relate to profit-maximizing theory? First, this theory does not say that profit is the only factor that ever influences the businessman. It says only that profits are an important enough consideration that a theory that assumes profit maximization to be the businessman's sole motive will produce predictions that are substantially correct. It follows from this that to point out that businessmen are sometimes motivated by considerations other than profits does not constitute a relevant criticism of the theory. It may be that profit-maximizing theory is substantially wrong. If so, the way to demonstrate this is to show that the predictions that follow from the theory are inconsistent with the facts.

> Why is this assumption made? First, because it is necessary to make some assumption about what motivates decision makers if the theory is to predict how they will act. Second, a great many of the predictions of theories based upon this assumption have been confirmed by observation. Third, there is no general agreement that an alternative assumption has yet been shown to yield substantially better results. (pp. 170-171)

For another view of the rationale for profit maximization see Nicholson (1975), pp. 221-222.

In addition to its primary purpose (of explaining what type of corporations have successful or unsuccessful proxy contests for control), this study brings empirical evidence to bear on the validity of the neoclassical theory of the firm and, in particular, on its assumption of profit maximization. Specifically, if the financial data regarding corporations which have had successful control contests reveal that these corporations are relatively poor performers compared to corporations which have had an unsuccessful control contest and corporations which have not had a proxy contest, this will provide indirect support for the theory of the firm and its assumption of profit maximization. On the other hand, data which do not reveal this will constitute evidence against the theory and its assumption.

Control Contests and the Stock Market

The stock market (which is an institution where publicly owned corporate securities are traded) has a number of important economic functions (Baumol, 1965; Baumol & Blinder 1979; Massaro, 1979). These functions include: (1) providing a means by which

corporations can grow and are encouraged to undertake capital expenditures, (2) allocating the nation's financial resources to various corporations, (3) providing individual investors with liquidity for investment funds, and (4) serving as an indicator of economic activity and of confidence in the economy. The function which is especially relevant to the present study is how the market encourages corporate managements to use the existing assets of their organizations most efficiently (e.g., to produce the highest profits) or how the market disciplines the less efficient managements who make low, but not necessarily negative, profits. Baumol (1965) and Baumol and Blinder (1979) have asserted that the stock market's pricing process accomplishes this function by assigning higher prices to the securities of corporations with high prospective earnings per unit of assets, and lower prices to the securities of corporations with low prospective earnings. Thus, a company which is operated inefficiently by its management presumably will have a lower stock price than if it were operated efficiently. Conversely, a company which is operated efficiently will have a higher stock price.

Empirical research has revealed that proxy contests for control frequently occur in corporations which are operated inefficiently (Austin, 1964, 1965; Wattel 1966; Whetten, 1957, 1959). The rationale for these contests is that when a company is operated inefficiently, replacement of its management by one which is more efficient (e.g., profit oriented) will increase the market value

of the company's stock. Thus, proxy contests--or the threat of them--may constitute an important disciplinary device by which stockholders encourage corporate managements to use the existing assets of their firms efficiently.

One reason for empirically studying the financial and structural characteristics of corporations which have had proxy contests for control is to test the validity of Baumol and Blinder's theory that the stock market, through its stock pricing process, encourages managements to use their corporations' assets efficiently.

An important criticism of the theory of stock market discipline concerns the relationship Baumol and Blinder posit between organizational efficiency (effectiveness) and profit maximization. Specifically, "unless many other variables are controlled for the relationship between effectiveness and profit maximization is at best dubious" (Shapiro, 1980, p. 1). This criticism may affect the theory's validity.

Integration

It is appropriate at this point to briefly summarize and integrate the discussion of the two preceding sections of this chapter. The stock pricing process is one mechanism by which the stock market insures that the existing assets of corporations are utilized most efficiently (e.g., profitably). If this mechanism is effective to any degree, then corporations will be subject to that degree to direct market discipline. If successful control contests occur in corporations which are operated inefficiently and which have lower stock prices than corporations which are operated more efficiently, then

this will provide support for Baumol and Blinder's theory. Furthermore, if use of the proxy contest as a disciplinary device works perfectly, then corporate managements which do not maximize profits will not survive. This conclusion is relevant to the controversy regarding the assumption of profit maximization in the neoclassical theory of the firm. Specifically, support for the Baumol and Blinder theory will provide indirect support for the theory of the firm and, in particular, for its assumption of profit maximization.

Qualifications

In the real world the use of the proxy contest as a disciplinary device may not work perfectly. The important question is how imperfect is the device? A comparative study of the characteristics of corporations which have had a successful control contest, an unsuccessful control contest, or no proxy contest will indicate how well this mechanism works. It must be emphasized, however, that the present investigation is unlikely to provide a definitive answer to this question because it only considers one way (e.g., proxy contests) in which the stock market disciplines firms that are operated inefficiently. Other ways that inefficiently operated firms are disciplined, which are not considered in this study, are tender offers and the difficulty they have in selling new stock to raise capital. Aranow and Einhorn (1973) and Meade (1968), and Baumol and Blinder (1979) discuss each of these disciplines respectively. Furthermore, even though a strong relationship might exist between control contests and profit maximization, moderating factors may

make it difficult to generalize this relationship across all firms and industries.

Hypothesis Development

Hypotheses will now be developed to describe the financial and structural characteristics of corporations which have had a successful or an unsuccessful proxy contest for control. Testing these hypotheses empirically should provide information about what differences, if any, exist between firms in each category. This information may also be useful in evaluating the validity of the theory of the firm (including its assumption of profit maximization) and of Baumol and Blinder's theory.

A point in time is implied in each of the sixteen hypotheses which follow. All tests of these hypotheses will be made across the three year period immediately preceding each corporation's control contest. The rationale for selecting this particular time period is discussed under the heading, "Use of Means" in Chapter III.

Financial characteristics. Accounting variables will be used to describe the financial characteristics of corporations which have had a successful or an unsuccessful control contest. Although there are many such variables, the most meaningful in this context are the: (1) rate of return on assets (X_1), (2) rate of return on equity (X_2), (3) net income (X_3), (4) dividend payout rate (X_4), (5) annual cash dividends per share of common stock (X_5), (6) average market value (price) per share of common stock for a given 12 month period (X_6), (7) current ratio (X_7), and (8) price-earnings ratio

(X_8). These variables were selected because they are the most meaningful for determining how efficiently corporate assets are used and because they are the most relevant to stockholders who are contemplating a control contest.

Every firm has an aggregate of invested capital in the form of assets. These assets are utilized by management to generate revenues and net income. Firms strive to operate in such a way as to provide shareholders with the best possible return per dollar invested. Rate of return on assets measures the productivity of total assets. It is calculated by dividing net income by total assets. Rate of return on equity measures the productivity of stockholders' investments. It is calculated by dividing net income by stockholders' equity.

Hypothesis 1--The value of rate of return on assets in corporations which have had a successful proxy contest for control is significantly less than it is in corporations which have had an unsuccessful control contest.

Hypothesis 2--The value of rate of return on equity in corporations which have had a successful proxy contest for control is significantly less than it is in corporations which have had an unsuccessful control contest.

The net income of a corporation measures its effectiveness with regard to profitability. If operations are successful, revenues and other gains will exceed expenses and losses. This will result in a positive net income.

Hypothesis 3--The value of net income in corporations which

have had a successful proxy contest for control is significantly less than it is in corporations which have had an unsuccessful control contest.

Common stockholders hope to receive a return based on two sources: dividends and capital gains. Dividends are only paid if a corporation earns sufficient net income and if its board of directors approves their payments. Present and estimated future earnings are the most important considerations in dividend payment decisions (Massaro, 1979). Capital gains arise from an increase in the market price of a company's common stock, which is generally associated with a growth in earnings per share.

The dividend payout rate is the percentage of earnings that a company pays in dividends. It is found by dividing annual cash dividends per share of common stock by annual earnings per common share. The variable, annual cash dividends per share of common stock, is self-explanatory and needs no comment.

Hypothesis 4--The value of the dividend payout rate in corporations which have had a successful proxy contest for control is significantly less than it is in corporations which have had an unsuccessful control contest.

Hypothesis 5--The value of annual cash dividends per share of common stock in corporations which have had a successful proxy contest for control is significantly less than it is in corporations which have had an unsuccessful control contest.

Some stockholders regard a corporation's dividend payout rate

and the annual cash dividends paid per common share as being minimally important. These investors are primarily concerned with changes in the market value of their stock. This is because tax rates are considerably lower on long-term capital gains from stock which has increased its market value than they are on income from dividends. If corporate common stock is held for more than twelve months, it qualifies for long-term capital gains treatment. Thus, if a corporation follows a policy of paying little or no cash dividends, this helps investors to minimize their taxes. Stockholders who are more sensitive to changes in stock prices than to payment of cash dividends would be unlikely to initiate or support a control contest caused solely by a low dividend payout rate.

Average market value per share of common stock for a given 12 month period is equal to the mean of the high and low prices of a corporation's stock during this period. This variable is used to calculate the price-earnings ratio and will also be used in the multivariate analyses which are described in the following chapter.

The current ratio denotes the liquidity position of a corporation, the ratio of its total current assets to its current liabilities. Austin (1964, 1965) and Whetten (1957, 1959) cite large reserves of liquid assets as a cause of control contests.

Hypothesis 6--The current ratio in corporations which have had a successful proxy contest for control is significantly greater than it is in corporations which have had an unsuccessful control contest.

The price-earnings (P/E) ratio is a measure of corporate

growth. It is found by dividing the average market price per share of a corporation's common stock for a given 12 month period by the corporation's earnings per common share for that same period. High P/E's are associated with high projected earnings growth, high expected dividend payout, and low variation in the rate of earnings growth (Whitbeck & Kisor, 1963).

Hypothesis 7--The price earnings ratio in corporations which have had a successful proxy contest for control is significantly less than it is in corporations which have had an unsuccessful control contest.

Structural characteristics. The following variables describe the basic structural characteristics of a corporation: (1) dollar volume of sales (X_9), number of employees (X_{10}), and number of common stockholders of record (X_{11}) measure organizational size, (2) percentage of management and director ownership of common stock (X_{12}), (3) board size (X_{13}), (4) percentage of inside directors (X_{14}), (5) percentage of outside directors (X_{15}), (6) domestic corporation (X_{16}), (7) multinational corporation (X_{17}), and (8) number of corporate offices, plants, and/or subsidiaries located outside the United States (X_{18}). Together the structural and financial variables provide a reasonably comprehensive description of an organization.

Although it has been suggested that proxy contests seldom occur in this nation's largest corporations (Seligman, 1978), the relationship between corporate size and the frequency of successful

and unsuccessful control contests has not been empirically investigated. Intuitive arguments posit that there is an inverse relationship between corporate size and the probability of a successful control contest. These arguments are based on the belief that large corporations generally have so many stockholders that insurgents find it extraordinarily difficult to win sufficient support to gain control of the board. On the basis of this reasoning it may be hypothesized that:

Hypothesis 8--The dollar volume of sales in corporations which have had a successful proxy contest for control is significantly less than it is in corporations which have had an unsuccessful control contest.

Hypothesis 9--The number of employees in corporations which have had a successful proxy contest for control is significantly less than it is in corporations which have had an unsuccessful control contest.

Hypothesis 10--The number of common stockholders of record in corporations which have had a successful proxy contest for control is significantly less than it is in corporations which have had an unsuccessful control contest.

In corporations where management and/or directors own a significant percentage of common stock, it is logical to assume that insurgents will be unlikely to gain control of the board of directors. It follows from this assumption that:

Hypothesis 11--The percentage of management and director

ownership of common stock in corporations which have had a successful proxy contest for control is significantly less than it is in corporations which have had an unsuccessful control contest.

Board size refers to the aggregate number of full-time directors. Substantial empirical evidence shows that board size varies considerably among firms (Bacon, 1973; Brown, 1972; Copeland & Towl, 1947; Laube, 1967) but that it has a consistently moderate direct relationship with company size (Bacon, 1973; Brown, 1972; Miner, 1978; Pfeffer, 1972). Since board size and company size are directly related, it follows that:

Hypothesis 12--Board size in corporations which have had a successful proxy contest for control is significantly less than it is in corporations which have had an unsuccessful control contest.

An inside director is generally defined as any presently employed or retired executive of a corporation. Inside directors usually hold the position of CEO, president, chairman, vice president, retired senior executive, or chief executive of an operating subdivision, subsidiary, or affiliated firm (Bacon, 1973). An outside director is any person who serves on the board of a corporation in which he or she is not employed. Outside directors are most often CEOs, presidents, chairmen, and executive or senior vice presidents of corporations of equal size; senior officers of commercial banks; and senior partners in law and investment banking firms (Bacon, 1973; Groobey, 1974; Mace, 1971; Zeitlen, 1974). Outside directors outnumber inside directors in most major organizations (Bacon 1973; Brown,

1972; Clendenin, 1972). Austin (1964, 1965) and Whetten (1957, 1959) have found that one cause of proxy contests is the stockholder belief that a board which consists of a majority of inside directors cannot properly protect their interests.

Hypothesis 13--The percentage of inside directors in corporations which have had a successful proxy contest for control is significantly greater than it is in corporations which have had an unsuccessful control contest.

Hypothesis 14--In corporations which have had a successful proxy contest for control the percentage of inside directors is significantly greater than the percentage of outside directors.

Since there is no single, agreed-upon definition of either a domestic or a multinational corporation, each will be defined as follows for purposes of this study. A domestic corporation has offices, plants, and/or subsidiaries in the United States only. A multinational corporation has significant operations, which include offices, plants, and/or subsidiaries, in the United States and in at least one other country. Domestic corporation (X_{16}) and multinational corporation (X_{17}) are used in the hypotheses which follow. The number of corporate offices, plants, and/or subsidiaries located outside the United States (X_{18}) will be used in the multivariate analysis in Chapter IV.

Hypothesis 15--The number of domestic corporations which have had a successful proxy contest for control is significantly less than the number of domestic corporations which have had an unsuccessful

control contest.

Hypothesis 16--The number of domestic corporations which have had a successful proxy contest for control is significantly greater than the number of multinational corporations which have had a successful control contest.

Governmental regulation of the price an organization can charge for its goods and services constitutes an important structural contingency. Organizations which operate in regulated industries include banks, insurance companies, transportation firms, and utilities. It is presumed that there are fewer proxy fights in regulated than in non-regulated industries because stockholders may attribute inefficient operations (resulting in lower profitability, stock prices, growth, etc.) to management policies and governmentally imposed constraints rather than to the former alone. The realization by dissatisfied stockholders that there is only a limited amount of control management has over corporate operations may dissuade many of them from initiating or supporting a control contest. Adding to the presumption that fewer proxy contests for control occur in regulated industries is the fact that organizations in these industries typically have a majority of outside directors on their boards (Pfeffer, 1972). This fact eliminates one cause of proxy contests: stockholders' belief that a board which consists of a majority of inside directors cannot properly protect their interests. Investigation of these and other presumed effects government regulation has upon proxy fights is beyond the scope of the present investigation.

However, this is a subject for future research.

Before testing each of the foregoing hypotheses and discussing the results, it is necessary to consider the nature of the corporations included in this study, how data was collected, and other topics related to research methodology. This is the subject of the following chapter.

CHAPTER III

RESEARCH METHODOLOGY

Sample

All public sources that report the occurrence of proxy contests were reviewed for the years 1964-1978. The corporations included in this study (N=93) are those: (1) which these sources identify as having had a proxy contest for control with a definitive result during this period, (2) which were traded on a securities market in the United States during the year of and the three years preceding their control contest, and (3) for which adequate financial and structural data are available for analysis. These corporations represent approximately .12 per cent of the total number of corporations subject to the SEC's proxy rules during this time period. Letters were mailed to the secretary or chief executive officer of each of these corporations to verify the type, date, and results of its proxy contest. Assurance was given that their corporation would not be identified in this study. Appendix A contains an example of the original and follow-up letters.

Table 6 presents an analysis of the 93 corporations cited above in terms of total number of control contests per year, number and per cent won by management, and number and per cent won by insurgents. Seventy-one (76%) of the 93 control contests were won by management and 22 (24%) were won by insurgents. As is shown in Table 7, the 93 corporations are from widely divergent industries, although most (nearly 57%) are involved in manaufacturing.

Table 6

Analysis of Corporations Included in this Study to Describe the Financial and Structural Characteristics of Firms Which Have Had a Successful or an Unsuccessful Proxy Contest for Control

	Proxy Contests for Control				
Year	Total No.	No. Won by Mgt.	Per Cent	No. Won by In-Surgents	Per Cent
1964	5	3	60	2	40
1965	9	7	78	2	22
1966	6	6	100	0	0
1967	12	8	67	4	33
1968	4	3	75	1	25
1969	5	4	80	1	20
1970	3	2	67	1	33
1971	11	10	91	1	9
1972	6	4	67	2	33
1973	4	3	75	1	25
1974	3	2	66	1	33
1975	7	5	71	2	29
1976	7	4	57	3	43
1977	7	6	86	1	14
1978	4	4	100	0	0
Total	93	71	76	22	24
Mean	6.2	4.7	76	1.5	24
Median	6	4	75	1	25

Table 7

Distribution by Industry of Corporations Included in this Study to Describe the Financial and Structural Characteristics of Firms Which Have Had a Successful or an Unsuccessful Proxy Contest for Control

Industry[a]	Number	Per Cent[b]
Manufacturing	53	56.9
Service	9	9.6
Retail Trade	5	5.3
Transportation	5	5.3
Wholesale Trade	4	4.3
Finance	3	3.2
Insurance	3	3.2
Mining	3	3.2
Public Utilities	3	3.2
Real Estate	3	3.2
Construction	2	2.1
Total	93	99.5

[a]Industry titles are the same as those used in the Enterprise Standard Industrial Classification developed by the Office of Management and Budget, Executive Office of the President. The classification of each corporation by industry was found in the Directory of Companies Required to File Annual Reports with the Securities and Exchange Commission, 1964-1978.

[b]The total is less than 100 per cent because of rounding.

The choice of the period 1964-1978 was dictated by several considerations. First, these years saw an unprecedented number of stockholder protests against many traditional corporate policies. Although not all these protests took the form of proxy contests for control, it is interesting and informative to consider those that did during this period of stockholder activism.

Second, financial and structural data about corporations which have had a successful or an unsuccessful control contest should be as current as possible in order to be most meaningful in the present and most generalizable for the future. This assumes that corporate environments and characteristics change over time and, therefore, newer data will be more representative than older data. Obviously, 1964-1978 is a relatively recent period in corporate history.

Third, and most importantly, the 1964-1978 period was selected because those were the only years in which sufficient information about corporations which had a proxy contest for control could be gathered.

A sample of 71 corporations which have not had a proxy contest was used, along with the 93 corporations which had a successful or an unsuccessful control contest, to test the validity of the profit maximization assumption of the neoclassical theory of stock market discipline. The size of the sample of corporations which have not had a proxy contest was equated with the number of corporations which had an unsuccessful control contest. As shown in Table 8, this sample's distribution by industry was made approximately equal

Table 8

Distribution by Industry of the Sample of Corporations Which Have Not Had a Proxy Contest

Industry[a]	Number[b]	Per Cent[c]
Manufacturing	41	57.7
Service	7	9.8
Retail Trade	4	5.6
Transportation	4	5.6
Wholesale Trade	3	4.2
Finance	2	2.8
Insurance	2	2.8
Mining	2	2.8
Public Utilities	2	2.8
Real Estate	2	2.8
Construction	2	2.8
Total	71	99.7

[a]Industry titles are the same as those used in the Enterprise Standard Industrial Classification developed by the Office of Management and Budget, Executive Office of the President. The classification of each corporation by industry was verified in the Directory of Companies Required to File Annual Reports with the Securities and Exchange Commission, 1964-1978.

[b]The number of firms in each industry was determined by multiplying the percentage of firms which had a successful or an unsuccessful control contest in the same industry (see Table 7) by 71 (e.g., service: .096 X 71 = 6.8 = 7).

[c]The total is less than 100% because of rounding.

to the distribution by industry of the 93 corporations which had a successful or an unsuccessful control contest. Furthermore, the sample of corporations which have not had a proxy contest was chosen from the identical time period (1964-1978) as the 93 corporations which had a successful or an unsuccessful control contest. A year between 1964 and 1978 was randomly selected (using a random number table) for every corporation in order to determine which particular year each of the 71 corporations would be chosen from. The table of contents section in the appropriate Moody's Manual (e.g., Moody's Industrial Manual, Moody's Transportation Manual, etc.) for each year chosen was used to select the indivudual corporations. A systematic procedure was used to obtain twice the number of companies required in each industry (e.g., manufacturing: 41 x 2 = 82, service: 7 x 2 = 14, etc.). This was done to insure that there would be an adequate number of companies having the necessary financial data to test the profit maximization assumption and the Baumol and Blinder theory. To select each company in a given industry for a given year, the number of pages in the table of contents of Moody's for that year was divided by twice the number of companies needed for the same year. This procedure provided the page interval (e.g., select one company from every other page). Next, one company was randomly selected from each of these pages. This established a pool of companies for each industry from which firms could be selected for inclusion in the analysis. Finally, one company at a time was randomly selected from each industry pool and it was

determined whether Moody's contained the necessary financial data for the company to be included in the analysis. When the required number of companies in each industry (see Table 8) with the requisite financial data had been selected from each pool, the sample (N=71) was complete.

This selection procedure insures that the distribution by industry of corporations which have not had a proxy contest is about equal to the distribution by industry of corporations which have had a successful or an unsuccessful proxy contest for control (see Tables 7 and 8). Furthermore, the data for corporations which have not had a proxy contest are drawn from the same period (1964-1978) as the data for corporations which have had a successful or an unsuccessful control contest. These characteristics, in addition to relatively large sample size and the fact that firms which have not had a proxy contest were randomly selected, contribute to the sample's relevance and validity.

Data Collection

Data regarding the financial and structural characteristics of corporations which have had a successful or an unsuccessful proxy contest for control were obtained from a number of public sources, including corporate annual reports and proxy statements, Moody's Manuals, Standard and Poor's Corporation Records, Fortune's Directory of the 500 largest U. S. Industrial Corporations, Fortune's Directory of the Second 500 largest U. S. Industrial Corporations, and SEC documents. To help ensure its accuracy, the source of data for each

corporation was compared to at least one other source. As indicated in the preceding section of this chapter, data regarding the financial characteristics of corporations which have not had a proxy contest were obtained exclusively from Moody's Manuals.

In view of the fact that most of the variables used to measure the financial and structural characteristics of corporations in this study are based on accounting data, it is necessary to briefly consider their reliability and validity. Researchers (such as Singh & Whittington, 1968) have found that the variables selected for use in this study do, in fact, accurately and consistently measure what they claim to measure. Furthermore, despite inherent defects in all variables which are derived from accounting data (see Singh & Whittington, 1968, pp. 203-222 for a detailed discussion of these defects), corporate financial analysts generally agree that these variables still give the best available indication of the current and past financial records of a corporation.

Use of Means

Each continuous variable which is used to describe a financial or structural characteristic in this study is actually an arithmetic mean. Data from the three years immediately preceding a corporation's control contest are used to calculate each of these variables. For example, when determining the net income (X_3) of a corporation which had a control contest in 1978, X_3 is calculated by finding the arithmetic average of that corporation's net income for 1975-1977. The same procedure is used to calculate each variable in corporations

which did not have a proxy contest.

The use of means helps to insure that the variables more accurately represent the financial and structural characteristics of corporations included in this study by reducing the sharp fluctuations which may occur in companies' sales, earnings, etc. in any given year. A three year period was selected because it is just long enough to obtain a representative description of a corporation's financial and structural characteristics and because it is unlikely that the discontentment which causes stockholders to initiate a control contest would occur much before this time.

Statistical Analysis

Univariate analysis. In the chapter which follows, the financial and structural characteristics of corporations which have had a successful proxy contest for control are compared with those of corporations which have had an unsuccessful proxy contest for control. The data which represent these characteristics are first analyzed on a univariate basis. The purpose of this type of analysis is to distinguish between corporations which have had a successful control contest and corporations which have had an unsuccessful control contest on the basis of a single financial or structural characteristic. A t test is used in each of the first 14 hypotheses and a chi square test is used in both hypotheses 15 and 16 to test the null hypothesis that there is no significant difference in the mean values of each financial and structural characteristic for the two

groups of firms.

Multivariate analyses. The primary purpose of employing multivariate analysis in this research is to determine the extent to which differentiation between corporations which have had a successful proxy contest for control and corporations which have had an unsuccessful proxy contest for control is increased by using more than one financial and/or structural characteristic. That is, the use of multivariate analysis is important for finding subsets of the continuous variables which achieve a high degree of discrimination between the two groups of firms. Multivariate analysis is also used to predict the occurrence of a "dependent" variable by using several "independent" variables. For example, in this study perhaps two or more financial and/or structural characteristics may be used to predict the occurrence of a successful control contest. The multivariate technique which is used for these purposes is discriminant analysis.

Multivariate analysis is also used in this study to determine if there is a significant difference in the mean values of rate of return on assets, rate of return on equity, net income, and average market value (price) per share of common stock for a given 12 month period, respectively in corporations which have had a successful control contest, an unsuccessful control contest, or no proxy contest. The purpose of this analysis is to distinguish between each group of corporations on the basis of these financial characteristics so that inferences can be made regarding the validity

of the neoclassical theory of the firm and, in particular, its assumption of profit maximization and the Baumol and Blinder theory of stock market discipline. The multivariate technique which is used for this purpose in one-way analysis of variance. If the F ratio in an ANOVA is significant, the Scheffé test is used to determine which treatment level means differ from the rest by comparing the three means in pairs. Chi square tests were also used to determine if significant differences exist between the proportion of minus signs in corporations which have had a successful control contest, an unsuccessful control contest, or no proxy contest for the variables rate of return on assets, rate of return on equity, and net income.

CHAPTER IV

RESULTS

Univariate Analysis

A summary of the results of the univariate analysis is presented in Table 9. The means and standard deviations of the continuous variables for corporations which have had a successful control contest and for corporations which have had an unsuccessful control contest are reported in Table 10.

Hypothesis 1 suggests that the rate of return on assets in corporations which have had a successful proxy contest for control is less than it is in corporations which have had an unsuccessful control contest. This hypothesis was tested using the Behrens-Fisher test. The Behrens-Fisher technique is essentially similar to an ordinary t test of difference of means, except it does not assume equal variances for the values of the variables in the two groups (see Winer, 1971, pp. 41-44 for a discussion of this method). Although Table 10 indicates that the mean value of rate of return is lower in corporations which have had a successful control contest than in corporations which have had an unsuccessful control contest, the difference is not statistically significant ($t = 1.121$, $df = 90$). Hence, Hypothesis 1 is not supported.

Hypothesis 2 submits that the productivity of stockholders' investments, measured by rate of return on equity, is lower in corporations which have had a successful control contest than in corporations which have had an unsuccessful control contest. This

Table 9

Results of Univariate Analysis

Hypothesis	No. of Observations in Group 1	No. of Observations in Group 2	t or χ^2 [a]	Significance
1	22	70	-1.121 (90)	n.s.
2	19	66	0.831 (83)	n.s.
3	22	70	0.532 (90)	n.s.
4	22	68	0.329 (88)	n.s.
5	22	68	-0.576 (88)	n.s.
6	19	67	0.754 (84)	n.s.
7	21	64	-1.722 (83)	n.s.
8	22	71	-0.837 (91)	n.s.
9	21	65	-1.459 (84)	n.s.
10	20	67	-1.351 (85)	n.s.
11	15	47	-6.067 (60)	$\rho < .01$
12	22	68	0.483 (88)	n.s.
13	20	67	-0.075 (85)	n.s.
14	20	20	-0.049 (19)	$\rho < .06$
15	17	33	5.120 (1)	$\rho < .05$
16	17	5	6.545 (1)	$\rho < .02$

[a] t = t-statistic; χ^2 = chi square-static.

A t test is used in hypotheses 1-14 and a chi square test is used in hypotheses 15-16.

Degrees of freedom are shown in parentheses.

Table 10

Means and Standard Deviations of Continuous Variables for Each Group of Corporations

Variable	Corps. Which Have Had a Successful Control Contest			Corps. Which Have Had an Unsuccessful Control Contest		
	N	Mean	SD	N	Mean	SD
Rate of return on assets	22	-.015	.116	70	.014	.080
Rate of return on equity	19	.025	.142	66	-.031	.489
Net income	22	1,776,820	29760559E+5[a]	70	1,155,540	67149535E+5[b]
Dividend payout rate	22	.338	.486	68	.289	.858
Annual cash dividends per share of common stock	22	.292	.422	68	.359	.495
Average market value per share of common stock for a given 12 month period	22	14.713	16.394	68	14.625	10.133

Table 10--Continued

Variables	Corps. Which Have Had a Successful Control Contest			Corps. Which Have Had an Unsuccessful Control Contest		
	N	Mean	SD	N	Mean	SD
Current ratio	19	20.21	76.397	67	6.727	28.729
Price-earnings ratio	21	10.791	22.921	64	27.873	68.485
Dollar volume of sales	22	79,034,200	43144293E+8[c]	71	116,779,000	91671642E+8[d]
Number of employees	21	2,244.56	3,052.554	65	3,753.26	6,372.236
Number of common stockholders of record	20	5,704.56	2,995.676	67	8,470.56	15,830,666
Percentage of management & director ownership of common stock	15	.029	.038	47	.157	.128
Board size	22	9.879	3.982	68	9.455	3.438

Table 10--Continued

Variables	Corps. Which Have Had a Successful Control Contest			Corps. Which Have Had an Unsuccessful Control Contest		
	N	Mean	SD	N	Mean	SD
Percentage of inside directors	20	.420	.172	67	.424	.178
Percentage of outside directors	20	.579	.172	67	.575	.178
No. of corporate offices, plants, and/or subsidiaries located outside the U.S.	22	1.181	3.126	67	7.417	23.210

[a] 29760559E+5 = 2,976,055,900,000.
[b] 67149535E+5 = 6,714,953,500,000.
[c] 43144293E+8 = 4,314,429,300,000,000.
[d] 91671642E+8 = 9,167,164,200,000,000.

hypothesis is not supported by the results of the Behrens-Fisher test ($t = .831$, $df = 83$, n.s.).

The third hypothesis proposes that corporations which have had a successful proxy contest for control earn lower profits than corporations which have had an unsuccessful control contest. The results of the Behrens-Fisher test show that there is no significant difference in the mean values of net income for these two groups of firms ($t = .532$, $df = 90$). Therefore, Hypothesis 3 is not supported.

Hypothesis 4 states that the percentage of earnings that companies which have had an unsuccessful control contest pay in dividends is greater than the percentage paid by companies which have experienced a successful control contest. This hypothesis did not receive support using the Behrens-Fisher test ($t = .329$, $df = 88$, n.s.).

According to Hypothesis 5, the value of annual cash dividends per share of common stock in corporations which have had a successful proxy contest for control is less than it is in corporations which have had an unsuccessful control contest. An ordinary t test (which assumes homogeneity of variance) was used to test this hypothesis. Table 10 shows that the mean value of annual cash dividends per share of common stock is lower in the former group of firms than it is in the latter. Hypothesis 5 cannot be supported, however, because this difference is not statistically significant ($t = -.576$, $df = 88$).

Hypothesis 6 predicts that the liquid assets of corporations

which have undergone a successful control contest are greater than those of corporations which have undergone an unsuccessful control contest. Hypothesis 7 predicts that the P/E ratio in corporations which have had an unsuccessful control contest is greater than it is in corporations which have had a successful control contest. The Behrens-Fisher procedure was used to test each of these suppositions. Neither Hypothesis 6 ($t = .754$, $df = 84$, n.s.) nor Hypothesis 7 ($t = -1.722$, $df = 83$, n.s.) received support. Table 10 shows, however, that the current ratio (which measures liquid assets) and the P/E ratio are in the predicted directions.

The central issue in testing Hypotheses 8, 9, and 10 is to determine the relationship between corporate size and the frequency of successful and unsuccessful control contests. In essence, these hypotheses suggest that there is an inverse relationship between corporate size and the occurrence of a successful control contest. According to the results of the Behrens-Fisher test, there is no significant difference in the mean values of any of the following: (1) dollar volume of sales, (2) number of employees, and (3) number of common stockholders of record for those corporations which have or have not had a successful control contest. Hence, Hypotheses 8 ($t = -.837$, $df = 91$, n.s.), 9 ($t = -1.459$, $df = 84$, n.s.), and 10 ($t = -1.351$, $df = 85$, n.s.) are not supported. Again, Table 10 shows that each of these variables is in the predicted direction.

The Behrens-Fisher test demonstrates that there is a statis-

tically significant difference in the percentage of management and director ownership of common stock between corporations which have had a successful and corporations which have had an unsuccessful proxy contest for control ($t = -6.067$, $df = 60$, $p<.01$). Table 10 shows that managers and directors of corporations which have experienced an unsuccessful control contest own nearly 5.5 times more common stock in their companies than managers and directors of companies which have had a successful control contest. Thus, Hypothesis 11 is strongly supported.

The results of an ordinary t test do not support Hypothesis 12 ($t = .483$, $df = 88$, n.s.). This hypothesis suggests that the number of members of the board of directors in companies which have had a successful control contest is less than the number of board members in companies which have had an unsuccessful control contest.

Based upon Austin's (1964, 1965) and Whetten's (1957, 1959) findings that one cause of proxy contests is the stockholder belief that a board which consists of a majority of inside directors cannot property protect their interests, Hypotheses 13 and 14 were developed. These hypotheses state, respectively, that: (1) the percentage of inside directors in corporations which have had a successful proxy contest for control is significantly greater than it is in corporations which have had an unsuccessful control contest and (2) in corporations which have had a successful proxy contest for control the percentage of inside directors is significantly greater than the percentage of outside directors. The results of an

ordinary t test ($t = -.075$, $df = 85$, n.s.) do not support the first hypothesis since the percentage of outside directors (57.9%) is marginally greater ($t = -2.049$, $df = 19$, $p < .06$) than the percentage of inside directors (42%) in corporations which have had a successful control contest, the second hypothesis is not supported either. Given the lack of support for Hypotheses 13 and 14, Austin's and Whetten's results appear equivocal. Hypothesis 15 suggests that when a group of dissatisfied stockholders initiates a proxy contest for control in a domestic corporation, they are more likely to be unsuccessful than successful. Hypothesis 16 proposes that more domestic than multinational corporations have had a successful proxy contest for control. Because these hypotheses contain categorical variables, chi square tests are used to analyze the data. As can be seen in Table 9, the chi square statistic for Hypothesis 15 is significant at the .05 level ($\chi^2 = 5.12$, $df = 1$). With respect to Hypothesis 16, Table 9 reveals that $\chi^2 = 6.545$ ($df = 1$, $p < .02$). Therefore, both hypotheses are supported: (1) the number of domestic corporations which have had a successful proxy contest for control (n=17) is significantly less than the number of domestic corporations which have had an unsuccessful control contest (n=33) and (2) the number of domestic corporations which have had a successful proxy contest for control (n=17) is significantly greater than the number of multinational corporations which have had a successful control contest (n=5).

In summary, the results of the univariate analysis reveal

that most of the variables do not distinguish between corporations which have had a successful or an unsuccessful proxy contest for control at a statistically acceptable level of probability ($\rho \leq .05$). Only two variables, (1) percentage of management and director ownership of common stock and (2) domestic corporation, were found to make this distinction (at the .01 and .05 levels, respectively). Furthermore, it was found that there is a significant difference ($\rho < .02$) between the number of domestic corporations and the number of multinational corporations which have had a successful proxy contest for control. It was also found that the hypotheses pertaining to rate of return on assets, annual cash dividends per share of common stock, current ratio, P/E ratio, dollar volume of sales, number of employees, and number of common stockholders of record had results in the predicted directions but these results were not statistically significant.

Although the univariate analysis has yielded some insights about corporations which have had a successful or an unsuccessful proxy contest for control, it is impossible to arrive at an accurate profile of these firms without employing multivariate analysis. In multivariate problems of this kind it is quite possible for a variable which is individually a bad discriminator to become a good discriminator when it is considered along with other variables. In fact, in general, the relative discriminating powers of the variables considered on their own have no obvious relationship with the relative discriminating powers of the same variables in a

multivariate context.

Multivariate Analyses

Discriminant analysis. In the present research, stepwise discriminant analysis is used to identify those continuous variables which maximally separate firms which have had a successful control contest and firms which have had an unsuccessful control contest. "The mathematical objective of discriminant analysis is to weight and linearly combine the discriminating variables in some fashion so that the groups are forced to be as statistically distinct as possible" (Klecka, 1975, p. 435). This is accomplished by forming one or more linear combinations of the discriminating variables. (For a mathematical discussion of how the discriminant coefficients are derived see Cooley & Lohnes, 1971, pp. 243-250 and Tatsuoka, 1971, pp. 157-164.)

Discriminant analysis originated with the work of Fisher (1936) who developed the linear discriminant function. The rationale for selecting this technique is provided by Goldstein and Dillon (1978), who affirm the use of a linear discriminant function to predict categorical group membership when the predicator variables are continuous. Multivariate data are analyzed using version eight of the Statistical Package for the Social Sciences (SPSS) computer program for stepwise discriminant analysis (Klecka, 1975; Hull & Nie, 1979). This program selects variables for entry into the analysis on the basis of their discriminating power.

Version eight of the SPSS Stepwise Discriminant Analysis

program randomly selects between approximately 40 and 60 per cent of the cases in a given sample to construct the discriminant function. The remaining cases constitute a hold-out sample. The size of a particular hold-out sample is, therefore, a function of the number of cases used to construct the concomitant discriminant function. The discriminant function's ability to correctly classify cases is tested on the hold-out sample.

The rationale for using a subset of cases to construct the discriminant function and then classifying the remaining cases (the hold-out sample) using that same function is as follows:

> The percentage of cases correctly classified will always be optimistic when the same cases are used both to compute the discriminant function and in classification. Stepwise variable selection makes the situation much worse. To get an unbiased estimate of the error rate when a set of coefficients is applied to a different sample, [it is necessary to] randomly split the sample into two parts, one for computing coefficients and one for estimating the error rate. (Hull & Nie, 1979, p. 188).

Splitting a sample into two subsamples, one for computing the coefficients of the discriminant function and the other for testing the function's predictive power, reduces the effects of sampling errors and search bias. Each of these factors can lead to serious overstatement of the predictive power of a discriminant function. Predictions of group membership are made for each case in the second subsample (the hold-out sample) using the discriminant function developed from the data in the first subsample. The resulting classification matrix no longer is affected by either

sampling errors or search bias (Frank, et al., 1965).

The program to construct the discriminant function begins by selecting the predictor variable which yields the minimum value of Rao's V, a statistic which measures the distance between groups. This variable maximally differentiates between each group. The program then pairs this variable with each of the other predictor variables, one at a time, and computes the value of Rao's V for each pair. The second variable selected to enter the discriminant function is the one which, when added to the initial variable, produces the largest change in Rao's V. Then, each of the remaining variables is combined, one at a time, with these two variables. The variable, which when combined with the other two, produces the largest change in Rao's V is the third included in the discriminant function. This procedure continues until all predictor variables have been selected or until selection of additional predictor variables does not improve discrimination.

Before a predictor variable is used to calculate Rao's V a partial F test is performed. This test measures the discrimination a variable contributes to the discrimination achieved by the other variables selected. If the partial F ratio (the statistic derived from the F test) is too small, no variable will be entered into the discriminant function, regardless of how large a change it produces in Rao's V. Finally, variables are tested for removal from the discriminant function on the basis of their partial F ratio. If the

F ratio indicates that a variable no longer has significant discriminatory power, it is removed.

The stepwise program also calculates the minimum tolerance of each variable before including it in the analysis. A variable will not be included in the analysis whose minimum tolerance is less than 0.001.

> The minimum tolerance test is used . . . to give better protection against ill-conditioned matrices and multicollinear variable sets. The tolerance of a variable in the analysis at any given step is the proportion of its within-groups variance not accounted for by other variables in the analysis. . .The tolerance of a variable not in the analysis is the tolerance it would have if it were included. The minimum tolerance of a variable X is the smallest tolerance any variable in the analysis would have if X were included. (Hull & Nie, 1979, pp. 186-187).

For a more detailed description of the minimum tolerance test see Frane (1977).

The stepwise program was used to construct 91 unique discriminant functions from various combinations of six or fewer of the 16 continuous variables. The variables in each set were selected because of their proven or latent discriminatory power. Variables with proven discriminatory power include: (1) those found to be significant discriminators in the univariate analysis and (2) those with high data weights found in a discriminant function constructed using all 16 continuous variables. Variables with latent discriminatory power are contained in hypotheses which the univariate analysis found to be in the predicted direction but which were not statistically significant. Frank, et al. (1965) note that searching

for a good model (e.g., selecting subsets of variables which work best for a particular sample) may bias results. They suggest that bias results may be eliminated by estimating "parameters using only a part of the data available for a given study and compar[ing] predictions obtained by using these parameters against the remainder of the data" (p. 254). Thus, the use of hold-out samples in the present research eliminates biased results.

By comparing the percentage of corporations which each of the 91 discriminant functions had correctly classified to each function's chance level,[1] it was determined that only two of the functions are useful for predicting categorical group membership. The first function can optimally be used to classify corporations which have had an unsuccessful proxy contest for control. The second function can optimally be used to classify corporations which have had a successful control contest.

As indicated in Table 11, the first discriminant function consists of three continuous variables. The order of entry of each variable into this function (and each variable's consequent discriminatory power) is as follows: (1) rate of return on assets, (2) rate of return on equity, and (3) percentage of management and director ownership of common stock. The Pearson product-moment correlations between these variables are reported in Table 12. The correlations indicate that the variance between each pair of variables

Table 11

Summary of Results of First Stepwise Discriminant Analysis[a]

Step No.	Variable Entered or Removed[b]	No. of Variables Included	Rao's V	Change in Rao's V
1	Rate of return on assets	1	3.0511	3.0511
2	Rate of return on equity	2	7.0187	3.9676
3	Percentage of management and director ownership of common stock	3	9.1434	2.1247

[a]Sixty-one cases (16 corporations which had a successful and 45 corporations which had an unsuccessful control contest) were used to construct the first discriminant function.

[b]No variable was removed in any step of the analysis.

Table 12

Pearson Correlations Between Continuous Variables[a] [b]

Variable	Variable (listed by number) 1	2	3	4	5
1. Annual cash dividends per share of common stock	---				
2. Board size	.261 (.007)	---			
3. Dollar volume of sales	.258 (.007)	.179 (.045)	---		
4. Average market value per share of common stock for a given 12 month period	.604 (.001)	.218 (.020)	.252 (.008)	---	
5. Number of corporate offices, plants, and/or subsidiaries located outside the U.S.	.274 (.005)	.210 (.025)	.200 (.030)	.266 (.006)	---
6. Net income	.320 (.001)	-.022 (.418)	.533 (.001)	.290 (.003)	-.069 (.261)
7. Number of employees	.355 (.001)	.307 (.002)	.844 (.001)	.348 (.001)	.305 (.003)
8. Percentage of inside directors	-.193 (.038)	-.526 (.001)	-.052 (.313)	-.164 (.065)	-.106 (.167)
9. Percentage of outside directors	.193 (.038)	.526 (.001)	.052 (.313)	.164 (.065)	.106 (.167)
10. Number of common stock-holders of record	.222 (.020)	.290 (.004)	.567 (.001)	.247 (.011)	.253 (.010)
11. Rate of return on assets	.317 (.001)	.046 (.332)	.034 (.374)	.264 (.003)	-.050 (.320)
12. Rate of return on equity	.118 (.142)	-.059 (.296)	.017 (.438)	-.016 (.440)	-.022 (.420)
13. Dividend payout rate	.395 (.001)	.017 (.437)	.101 (.171)	.293 (.003)	.065 (.274)
14. Current ratio	-.095 (.194)	-.137 (.105)	-.075 (.245)	-.122 (.136)	-.051 (.323)
15. Price-earnings ratio	-.043 (.349)	-.108 (.161)	-.018 (.433)	.168 (.062)	-.039 (.364)
16. Percentage of management & director ownership of common stock	-.198 (.061)	-.475 (.001)	-.307 (.008)	-.203 (.058)	-.207 (.056)

Table 12--Continued

Variable	Variable (listed by number) 6	7	8	9	10
6. Net income	---				
7. Number of employees	.303 (.002)	---			
8. Percentage of inside directors	.077 (.239)	-.206 (.032)	---		
9. Percentage of outside directors	.077 (.239)	.206 (.032)	-1.00	---	
10. Number of common stockholders of record	.276 (.005)	.726 (.001)	-.184 (.049)	.184 (.049)	---
11. Rate of return of assets	.301 (.002)	.044 (.343)	.056 (.301)	-.056 (.301)	-.036 (.370)
12. Rate of return on equity	.233 (.016)	.010 (.462)	-.033 (.381)	.033 (.381)	-.095 (.202)
13. Dividend payout rate	.108 (.155)	.122 (.134)	-.148 (.088)	.148 (.088)	.164 (.067)
14. Current ratio	-.033 (.381)	-.168 (.068)	-.140 (.105)	.140 (.105)	-.042 (.353)
15. Price-earnings ratio	.019 (.432)	-.017 (.438)	.047 (.337)	-.047 (.337)	.017 (.437)
16. Percentage of management & director ownership of common stock	-.141 (.136)	-.412 (.001)	.371 (.001)	-.371 (.001)	-.304 (.009)

Table 12--Continued

	Variable	Variable (listed by number) 11	12	13	14	15	16
11.	Rate of return on assets	---					
12.	Rate of return on equity	.469 (.001)	---				
13.	Dividend payout rate	.161 (.064)	.046 (.338)	---			
14.	Current ratio	-.006 (.477)	.015 (.444)	.058 (.299)	---		
15.	Price-earning ratio	.129 (.120)	-.026 (.408)	.537 (.001)	-.084 (.229)	---	
16.	Percentage of management & director ownership of common stock	.168 (.095)	.015 (.452)	.009 (.471)	-.104 (.216)	.140 (.138)	---

[a]The Pearson correlations have been computed using version eight of the SPSS Computer program PEARSON CORR (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975).

[b]Significance levels are shown in parentheses.

is low. This means that the information each variable contributes to discriminate between the two groups of firms is not, for the most part, redundant of the information provided by the other variables.

The standardized discriminant function coefficients in Table 13 indicate the discriminatory power of each accompanying continuous variable in a multivariate context. Combining the three coefficients and their concomitant variables yields the following standarized linear discriminant function:

$$D = .96679X_1 - .91045X_2 + .51706X_{12}. \quad (1)$$

The discriminant score (D) for a given corporation is found by summing the product of each standardized coefficient and its corresponding standardized continuous variable. The value of D is reported in standard form. This means that, over all corporations in the analysis, the score has a mean of zero and a standard deviation of one. Thus, a particular discriminant score indicates the number of standard deviations that a corporation varies from the mean of all corporations on the discriminant function.

Since continuous variables are not generally expressed in standard form, standardized discriminant function coefficients are not very useful for computational purposes. Therefore, Table 13 also lists the unstandardized discriminant function coefficients. These coefficients do not express the relative discriminatory power of each variable since they have not been adjusted for the measurement scales and for variability in the continuous variables. A corporation's discriminant score is found by summing the products of the

Table 13

Coefficients of First Discriminant Function

Variable	Standardized Coefficient	Unstandardized Coefficient[a]
Rate of return on assets (X_1)	.96679	6.454406
Rate of return on equity (X_2)	-.91045	-2.817546
Percentage of management & director ownership of common stock (X_{12})	.51706	1.191513

[a]Constant = -.3599490.

raw value of each continuous variable and its corresponding unstandardized coefficient. Adding a constant to adjust for the grand means will yield a discriminant score which is equal to the one computed with standardized coefficients and variables.

Table 14 is a classification matrix for the first discriminant function. It shows the number and percentage of firms which have been correctly or incorrectly classified by the stepwise procedure. According to this table, the first discriminant function correctly classified 73.1 per cent of the corporations in the hold-out sample which had an unsuccessful control contest. This "hit-rate" is slightly above the chance level, making the first discriminant function somewhat useful for classifying corporations which have had an unsuccessful control contest. Table 15 reveals that the second discriminant function correctly classified 90.0 per cent of the corporations in the hold-out sample which had a successful control contest. The second function is, therefore, extremely valuable for classifying corporations which have had a successful control contest.

It should be noted again that the hold-out samples used to test each discriminant function vary in size (N=32 and N=43) because the number of cases used to construct each discriminant function is different. A more detailed explanation of why the hold-out samples vary in size and of how they are selected by the SPSS Stepwise Discriminant Analysis program is given in Hull and Nie (1979), pages 187-189.

As is shown in Table 16, the second discriminant function is composed of the following continuous variables (presented in decreas-

Table 14

Classification Matrix for First Discriminant Function[a]

Actual Group	Predicted Group Membership (listed by number) 1	2
1. Corps. Which Have Had a Successful Control Contest (n=6)	4 (66.7%)	2 (33.3%)
2. Corps. Which Have Had an Unsuccessful Control Contest (n=26)	7 (26.9%)	19 (73.1%)
Percent of Cases Correctly Classified:	71.88	

Chance Level = .70

[a]The first discriminant function has been used to classify cases in a hold-out sample (N=32).

Table 15

Classification Matrix for Second Discriminant Function[a]

Actual Group	Predicted Group Membership (listed by number) 1	2
1. Corps. Which Have Had a Successful Control Contest (n=10)	9 (90.0%)	1 (10.0%)
2. Corps. Which Have Had an Unsuccessful Control Contest (n=33)	15 (45.5%)	18 (54.5%)
Percent of Cases Correctly Classified:	62.79	

Chance Level = .64

[a]The second discriminant function has been used to classify cases in a hold-out sample (N=43).

Table 16

Summary of Results of Second Stepwise Discriminant Analysis[a]

Step No.	Variable Entered or Removed[b]	No. of Variables Included	Rao's V	Change in Rao's
1.	Percentage of management & director ownership of common stock	1	1.4509	1.4509
2.	Rate of return on equity	2	3.6602	2.2093
3.	No. of corporate offices, plants, and/or subsidiaries located outside the U.S.	3	4.9858	1.3256
4.	Rate of return on assets	4	7.4091	2.4233

[a]Fifty cases (12 corporations which had a successful and 38 corporations which had an unsuccessful control contest) were used to construct the second discriminant function.

[b]No variable was removed in any step of the analysis.

ing order of discriminatory power): (1) percentage of management and director ownership of common stock, (2) rate of return on equity, (3) number of corporate offices, plants, and/or subsidiaries located outside the Untied States, and (4) rate of return on assets. This function's standardized and unstandardized discriminant coefficients are presented in Table 17. Combining the four standardized coefficients and their concomitant variables yields the following linear discriminant function:

$$D = .87195X_1 - .64246X_2 + .84252X_{12} + .98343X_{18}. \qquad (2)$$

The Pearson product-moment correlations between each pair of variables in the second discriminant function are reported in Table 12. As was the case with the first discriminant function, the correlations indicate that the variance between each pair of variables is low. Thus, the information each variable contributes to classifying the firms does not repeat the information provided by the other variables.

Analysis of variance and chi square tests. In the present research, one-way analysis of variance is used to determine if significant differences exist between certain relevant financial characteristics of corporations (rate of return on assets, rate of return on equity, net income, and average market value per share of common stock for a given 12 month period) which have had a successful control contest, an unsuccessful control contest, or no proxy contest. The objective of this analysis is to provide a basis

Table 17

Coefficients of Second Discriminant Function

Variable	Standardized Coefficient	Unstandardized Coefficient[a]
Rate of return on assets (X_1)	.87195	9.808068
Rate of return on equity (X_2)	-.64246	-2.157787
Percentage of management and director ownership of common stock (X_{12})	.84252	1.937161
No. of corporate offices, plants, and/or subsidiaries located outside the U.S. (X_{18})	.98343	.006938790

[a]Constant = -.9226048

on which inferences can be made about the validity of the profit maximization assumption of the neoclassical theory of the firm and about the validity of the theory of stock market discipline.

Table 18 presents the means of the variables used in each one-way ANOVA. The result of the analysis of variance for rate of return on assets (see Table 19) indicates that at least two of the three means are not equal ($F = 4.76851$, $p < .01$). The most appropriate technique to determine which means differ is the Scheffé test (Hicks, 1973) because it may be applied a posteriori, it does not require equal sample sizes, and it allows an infinite number of comparisons. The Scheffé test shows that the mean of rate of return on assets is significantly greater in corporations which have not had a proxy contest than it is in corporations which have had a successful control contest. This is the only significant difference in means indicated by the Scheffé test for this ANOVA.

As is shown in Table 20, the result of the analysis of variance indicates that there is no significant difference between the means for rate of return on equity in each group of firms ($F = 1.23821$, n.s.). Table 21 shows that the value of the F ratio (7.55855) is significant at the .01 level. Thus, at least one mean differs significantly from the rest. According to the results of the Scheffé test, the net income in corporations which have not had a proxy contest is significantly greater than the net income in corporations which have had either a successful or an unsuccessful control contest.

Table 18

Means of Variables Used in ANOVAs[a]

Variable	Corps. Which Have Had a Successful Control Contest	Had an Unsuccessful Control Contest	Not Had a Proxy Contest
Rate of Return on Assets	-.0156364 (22)	.0142143 (70)	.0424366 (71)
Rate of Return on Equity	.0256842 (19)	-.0313485 (66)	.060493 (71)
Net Income	.177683 (22)	.115554 (70)	.659448 (71)
Average market value per share of common stock for a given 12 month period	14.7134 (22)	14.6254 (68)	26.8711 (71)

[a]Number of observations are shown in parentheses.

Table 19

Analysis of Variance for Rate of Return on Assets

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F Ratio
Total	162	1.15588		
Treatments	2	.0650223	.0325112	4.76851*
Error	160	1.09086	.00681789	

*$p < .01$

Table 20

Analysis of Variance for Rate of Return on Equity

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F Ratio
Total	155	18.2066		
Treatments	2	.289995	.144997	1.13821
Error	153	17.9166	.117102	

Table 21

Analysis of Variance for Net Income

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F Ratio
Total	162	130.673		
Treatments	2	11.2804	5.64021	7.55855*
Error	160	119.392	.746203	

*$\rho < .01$

Chi square tests were used to determine if significant differences exist between the proportion of minus signs in corporations which have had a successful control contest, an unsuccessful control contest, or no proxy contest for the variables rate of return on assets, rate of return on equity, and net income. The results of the tests indicate that the proportion of minus signs in corporations which have not had a proxy contest is significantly less than it is in corporations which have had a successful or an unsuccessful control contest for rate of return on assets ($\chi^2 = 9.306$, $df = 2$, $p < .01$), rate of return on equity ($\chi^2 = 7.257$, $df = 2$, $p < .05$), and net income ($\chi^2 = 7.551$, $df = 2$, $p < .05$).

Finally, the result of the ANOVA for average market value per share of common stock for a given 12 month period (shown in Table 22) indicates that the three means are not all equal ($F = 6.48337$, $p < .01$). The Scheffé test reveals that the average market value per share of common stock for a given 12 month period is significantly greater in corporations which have not had a proxy contest than it is in corporations which have had either a successful or an unsuccessful control contest.

Table 22

Analysis of Variance for Average Market Value per Share of Common Stock for a Given 12 Month Period

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F Ratio
Total	160	78199.7		
Treatments	2	5930.95	2965.47	6.48337*
Error	158	72268.7	457.397	

*$\rho < .01$

FOOTNOTES - CHAPTER IV

[1]The appropriate chance level for each discriminant function is determined by calculating the proportional chance criterion for unequal group sizes. The estimate for chance level is $C=p^2 + (1-p)^2$, where p is the proportion of corporations in the hold-out sample which have had a successful control contest and 1 - p is the proportion of corporations in the hold-out sample which have had an unsuccessful control contest (Lirtzman, 1981).

CHAPTER V

DISCUSSION AND SUMMARY

Development of a Theoretical Framework Regarding Proxy Contests for Control

The results of the univariate analysis indicate that it is difficult to distinguish between firms which have had a successful and firms which have had an unsuccessful proxy contest for control on the basis of a single corporate financial and/or structural characteristic. Indeed, only two such characteristics--percentage of management and director ownership of common stock and domestic corporation--were found to be useful in making this distinction.

The results of the discriminant analysis demonstrate, however, that it is possible for a variable which is individually a bad discriminator to become a good discriminator when it is considered along with other variables. Thus, this analysis produced two different linear discriminant functions containing various combinations of the continuous variables used to describe the financial and structural characteristics of corporations which have had a successful or an unsuccessful control contest. Austin's (1964, 1965) finding that proxy contests often have multiple causes lends indirect support to the conclusion that a combination of variables may be used to distinguish between each group of corporations.

The first discriminant function's individual and overall "hit rates" (see Table 14) indicate that it can optimally be used to

classify corporations which have had an unsuccessful proxy contest for control. A 90 per cent "hit rate" for corporations which have had a successful control contest and a 54.5 per cent "hit rate" for corporations which have had an unsuccessful control contest (see Table 15) indicate that the second discriminate function is most useful for classifying the former group of firms.

Since 66.6 per cent of the variables contained in the first discriminant function describe corporate financial characteristics (see Table 11), it may be inferred that these characteristics are more useful than structural characteristics for correctly classifying corporations which have had an unsuccessful control contest. Indirect support for this conclusion comes from empirical research by Austin (1964, 1965), Wattel (1966), and Whetten (1957, 1959). These investigators have found that proxy contests are caused by a variety of financial factors, including poor operating performance (general inefficiency and stagnant growth). The first discriminant function contains two of the variables which are typically used to measure these financial factors. Furthermore, the fact that the hypothesis involving rate of return on assets has results in the predicted direction adds a modicum of support to the foregoing conclusion. In the second discriminant function financial and structural characteristics are of equal importance in classifying corporations which have had a successful control contest (see Table 16).

The financial variables which are most useful for discriminating between each group of firms, based on the number of functions in

which they are included, are rate of return on assets and rate of return on equity. These variables are contained in both discriminant functions. According to the same criteria, the most useful structural variable is percentage of management and director ownership of common stock. This variable is also contained in both functions. Its ability to distinguish between each group of firms is substantiated by the strong support Hypothesis 11 received.

In Chapter I, it was stated that this study would attempt to answer the following questions: (1) what are the important financial and structural characteristics of corporations which have had a successful control contest? (2) how are these characteristics different from those of companies which have had an unsuccessful control contest? and (3) is it possible to identify specific financial and structural characteristics which may make a firm more likely to have a successful or an unsuccessful control contest?

From a univariate standpoint, percentage of management and director ownership of common stock, domestic corporation, and multinational corporation are the only variables tested which individually provide definitive answers to the preceding questions. First, in corporations which have had a successful control contest management and directors own considerably less common stock than in corporations which have had an unsuccessful control contest. Second, domestic corporations have more unsuccessful than successful control contests. Finally, successful control contests occur more often in domestic than in multinational corporations.

If we assume that domestic corporations are relatively small (especially compared to most multinational corporations) and that the common stock in such companies is often closely held by their management and directors, then one possible explanation of the above univariate results is the following: The reason domestic corporations have more unsuccessful than successful proxy contests for control is that the fairly large percentage of common stock held by their management and directors makes it very difficult for insurgents to acquire enough proxies to gain control of the board. Yet, because company size is a stronger deterrent to insurgents' success than concentrated ownership, there are more successful control contests in domestic than in multinational corporations.

From a multivariate standpoint, the important financial and structural characteristics of corporations which have had a successful control contest are: (1) percentage of management and director ownership of common stock, (2) rate of return on equity, (3) number of corporate offices, plants and/or subsidiaries located outside the United States, and (4) rate of return on assets. Three of these characteristics--percentage of management and director ownership of common stock, rate of return on equity, and rate of return on assets--are useful in classifying corporations which have had an unsuccessful control contest. Thus, it is possible to identify the specific financial and structural characteristics which make a firm more likely to have a successful or an unsuccessful control contest.

Neither the univariate nor the multivariate analyses identify

annual cash dividends per share of common stock, average market value (price) per share of common stock for a given 12 month period, current ratio, dividend payout rate, dollar volume of sales, net income, number of employees, number of common stockholders of record, board size, percentage of inside directors, percentage of outside directors, or price-earnings ratio as being useful in discriminating between the two groups of firms. Since percentage of inside directors is not a useful discriminator, no support is found in the present study for Austin's (1964, 1965) and Whetten's (1957, 1959) conclusion that one cause of proxy contests is the stockholder belief that a board which consists of a majority of inside directors cannot properly protect their interests. The lack of support for this conclusion is understandable given the fact that subsequent to the time of Austin's and Whetten's research, the boards of most major corporations consisted of a majority of outside directors (Bacon, 1973; Brown, 1972; Clendenin, 1972). Additionally, Austin's, Whetten's, and Wattel's (1966) finding that large reserves of liquid assets is a cause of proxy contests is not supported by this investigation because current ratio (the variable used to measure liquid assets) was not found to be a useful discriminator.

Evidence Concerning the Theory of the Firm and the Theory of Stock Market Discipline

In addition to its primary purpose of empirically examining the salient financial and structural characteristics of corporations which have had a successful or an unsuccessful proxy contest for

control and relating these characteristics to a theoretical framework, this dissertation brings empirical evidence to bear on the validity of: (1) the neoclassical theory of the firm and, in particular, on its assumption of profit maximization and (2) the Baumol and Blinder theory of stock market discipline. Since each of these theories is described in Chapter II, no attempt will be made to restate those descriptions here.

Theory of the firm. The principal assumption of the neoclassical theory of the firm is that corporate management is primarily concerned with maximizing profits. It may be conjectured that: (1) corporations which have not had a proxy contest are more profitable than either corporations which have had a successful or an unsuccessful control contest, (2) corporations which have had an unsuccessful control contest are more profitable than corporations which have had a successful control contest, and (3) corporations which have had a successful control contest are less profitable than either of the other two groups of firms. The rationale for these suppositions is that: (1) the lower a company's profitability, the more likely a proxy contest is to occur and (2) if a proxy contest does occur, the lower a company's profitability, the more likely its stockholders are to assign their proxies to a group of insurgents seeking control of the board. Insurgents promise stockholders that if they are successful in winning a majority of directorships, they will replace the incumbent management with one which is more profit oriented.

The variables which were used to measure profitability in this investigation are rate of return on assets, rate of return on equity, and net income. The results of the ANOVAs and Scheffé tests in Chapter IV provide some support for the foregoing suppositions. Specifically, it was found that: (1) rate of return on assets is significantly greater in corporations which have not had a proxy contest than it is in corporations which have had a successful control contest and (2) net income in corporations which have not had a proxy contest is significantly greater than it is in corporations which have had either a successful or an unsuccessful control contest. Although no significant difference was found for rate of return on equity between each group of firms, the data in Table 18 show that rate of return on equity is greater in corporations which have not had a proxy contest than it is in corporations which have had either a successful or an unsuccessful control contest.

The results of the chi square tests in Chapter IV provide support for the supposition that corporations which have not had a proxy contest are more profitable than corporations which have had a successful or an unsuccessful control contest. Specifically, it was found that the proportion of minus signs in corporations which have not had a proxy contest is significantly less than it is in corporations which have had a successful or an unsuccessful control contest for the variables rate of return on assets, rate of return on equity, and net income.

Considered in toto, these findings constitute moderate support

for the profit maximization assumption and, consequently, for the neoclassical theory of the firm.

Theory of stock market discipline. Baumol and Blinder's theory of stock market discipline posits that the stock market disciplines managements of corporations which are operated inefficiently (e.g., which make low, but not necessarily negative, profits) by assigning low prices to the securities of their corporations. Since empirical research has demonstrated that proxy contests frequently occur in corporations which are operated inefficiently (Austin, 1964, 1965; Wattel, 1966; Whetten, 1957, 1959), it seems reasonable to assume that the price of common stock in corporations which have had a successful or an unsuccessful proxy contest for control will be lower than it is in corporations which have not had a proxy contest. The evidence from the present research strongly supports this assumption. As reported in Chapter IV, the average market value per share of common stock for a given 12 month period was found to be significantly greater in corporations which have not had a proxy contest than it is in corporations which have had either a successful or an unsuccessful control contest.

The nature and degree of the discipline exercised by the stock market has an important bearing on the controversy concerning the profit maximization assumption of the theory of the firm. The results of the present study show that the stock market encourages managements to use their corporations' assets most efficiently (e.g., to produce the highest profits) in order to reduce the risk of exper-

iencing a control contest. This finding provides some support for the profit maximization assumption of the theory of the firm.

Practical Implications for Corporate Management

The results of this research have several practical implications for corporate management. First, this research identifies some of the financial factors which may cause a proxy fight. These factors are low profitability (as measured by rate of return on assets, rate of return on equity, and net income) and low market value of common stock, compared to corporations which have not had a proxy contest. Furthermore, this research identifies some corporate structural characteristics which may determine the outcome of a proxy contest for control. These characteristics are percentage of management and director ownership of common stock and domestic corporation. Specifically, successful control contests occur more often in: (1) domestic than in multinational corporations and (2) corporations in which management and directors own only a small percentage of the common shares outstanding.

Second, since the number of successful proxy contests for control is greater in corporations in which management and directors own a small percentage of common stock, this suggests that the greater this group's percentage of ownership, the less chance insurgents have for gaining control of the board. Again, the finding that domestic corporations have fewer successful than unsuccessful control contests may be due to the relatively large percentage of common stock owned by their management and directors. Corporate managements, therefore,

should consider the merits of increasing employee (particularly, management and director) common stock ownership. Although the present tax laws do not favor the use of stock options, there are a number of alternative methods for increasing stock ownership among employees. These methods include market value purchases, book value purchases, and exercise bonuses. (For a description of these techniques see Glueck, 1979, pp. 321-322.)

Third, the finding that there are more successful proxy contests for control in domestic than in multinational corporations implies that company size (assuming that multinationals are significantly larger in size than domestics) may influence the results of control contests. This inference is partially supported by the fact that the means of each of the three measures of organizational size (dollar volume of sales, number of employees, and number of common stockholders of record) are slightly (but not significantly) lower in corporations which have had a successful control contest (see Table 10). If smaller corporations are indeed more likely to have successful control contests, then one way of averting this outcome is to increase organizational size. This suggestion may be particularly applicable to medium-sized firms which are not small enough to be closely held by their management and directors and which are smaller than the larger multinationals.

Achieving the required increase in size to avert a successful control contest may be a problem for companies with low profits. For example, a company with low profits may not have sufficient

retained earnings to enlarge itself. There are, however, some possible methods such companies can use to increase their size. First, if a company's profits are not extremely low and if the company has very few corporate bonds outstanding, it might be able to obtain capital to expand by issuing more bonds. The company might also issue more equity to finance expansion. A second way for a company to enlarge itself is by participating in a friendly merger with a company of similar size and profitability. Third, a company may increase its size by acquiring smaller companies through stock exchanges.

Fourth, in order to reduce the risk of having a proxy contest for control, corporate managements should pursue profits vigorously and attempt to maximize them whenever possible.

The final practical implication of this study pertains to the potential value of the two discriminant functions for predicting the results of control contests. These functions may be used as supplements to the methods managers (and dissident shareholders) now employ to make such predictions. Obviously, of course, the development of discriminant functions which have higher "hit rates" would be of significantly greater value.

Suggestions for Future Research

This study suggests further lines of research. Additional financial and structural variables should be investigated to determine their value in differentiating between corporations which have had a successful and corporations which have had an unsuccessful

proxy contest for control. A replication of the current study during a different time period, particularly one in which there are more corporations which have had a successful control contest, appears to be in order. Determining the nature and amount of difference between the variables used to separate each group of firms would also be enlightening. Finally, a useful objective for future research would be to determine what other financial and/or structural characteristics can be used to distinguish between corporations which have had a successful control contest, an unsuccessful control contest, or no proxy contest.

Summary

This dissertation is the first attempt to empirically identify the financial and structural characteristics of corporations which have had a successful or an unsuccessful proxy contest for control of their boards of directors and to relate these characteristics to a theoretical framework. It remains for future research to validate the current results, to explain more precisely what kind of corporations have successful or unsuccessful control contests, and to explain in greater detail how the behavior of individual firms is related to the occurrence of these contests.

In conclusion, exploring the differences between corporations which have had a successful or an unsuccessful proxy contest for control and relating these findings in applied settings appears to be a prolific area for future research.

APPENDICES

Appendix A

Dear

I would truly appreciate it if you would send me a copy of your corporation's annual report for 19 -19 , inclusive.

In addition, I would like to know whether your company was involved in a proxy contest for control of its board of directors (e.g., insurgents seeking majority representation on the board) during 19 and what the results of this contest were (e.g., were the insurgents successful or unsuccessful in gaining control?).

The information you send me will be used as part of a research project I am conducting regarding the characteristics of publicly traded corporations which have had successful or unsuccessful proxy contests for control. Please be assured that your company's name will not be identified in any part of the study. I will be happy to send you a copy of the results of my research if you desire.

Thank you very much for your kind attention and help.

Sincerely yours,

Alan N. Miller
Ph.D. Candidate in Business
Baruch College, City University
of New York

3113 Floral Vista Avenue
Henderson, Nevada 89015

Dear

Recently, I wrote to you requesting copies of your corporation's annual report for 19 -19 , inclusive. Since I have not received a reply, I am writing again to request the same material. In addition, please advise me whether your company was involved in a proxy contest for control of its board of directors (e.g., insurgents seeking majority representation on the board) during 19 and what the results of this contest were (e.g., were the insurgents successful or unsuccessful in gaining control?).

The results of my research may provide practical information for corporate officers wishing to preclude costly proxy contests. As I mentioned in my previous letter, I will be happy to share the results of this research project with you if you desire.

I would truly appreciate your prompt reply. Thank you for your kind attention.

Sincerely,

Alan N. Miller
Ph.D. Candidate in Business
Baruch College, City University
of New York

3113 Floral Vista Avenue
Henderson, Nevada 89015

Corp.	X_5	X_{13}	X_9	X_6	X_{16}	X_3	X_{10}	X_{14}	X_{15}	X_{11}	X_1	X_2	X_4	X_7	X_8	X_{12}	a
00100	0.0000	05.00	0000062000.00	01.960	000	-00427000.00	00009.33	.530	.470	002257.33	-.270	00.990	0.00	006.17	-017.65	.9900	1
00110	0.0000	13.67	0055986297.00	03.030	000	02556705.30	00407.30	.340	.660	010071.30	.003	0.040	0.00	000.99	-007.54	.0100	1
00120	1.5200	14.00	0019042523.00	20.920	000	01307430.30	05000.00	.220	.780	002466.70	.040	0.050	1.51	003.76	027.72	.0500	1
00130	0.5100	08.67	0601313567.30	18.190	000	07205547.00	11666.70	.650	.350	006612.00	.030	0.090	0.31	002.05	010.95	.0010	1
00140	0.0000	05.67	0000207377.33	03.250	000	-00033536.67	00000.99	.290	.710	004600.00	-.002	-0.002	0.00	335.62	-017.25	.0200	1
00150	0.0000	13.00	0015129634.00	00.040	000	-00001921.00	00400.00	.690	.310	002000.00	-.060	00.990	0.00	001.97	0009.99	.9900	1
00160	0.0000	12.00	0235496299.70	03.440	001	-06760143.00	03543.33	.500	.500	007547.00	-.060	-0.170	0.00	002.57	004.65	.0070	1
00170	1.0000	21.00	0025318045.00	23.500	000	02401990.00	00793.30	.140	.860	004560.00	.006	00.990	0.49	000.99	011.61	.9900	1
00180	0.0000	05.00	0006802079.30	01.550	000	00340059.00	00218.30	.470	.530	000276.70	.040	0.150	0.00	003.07	001.31	.1500	1
00190	0.5750	11.00	0127965703.00	25.670	007	04104025.70	08475.70	.110	.890	001149.70	.050	0.110	0.30	003.06	013.22	.0930	1
00200	0.6400	11.00	0015749493.00	21.290	000	00518052.33	00275.70	.270	.730	004960.50	.009	0.050	1.51	000.74	047.66	.0200	1
00210	0.0300	09.33	0024193302.00	04.690	000	-00150495.70	00837.30	.520	.480	001030.00	-.020	-0.020	0.42	002.50	019.76	.0400	1
00220	0.0000	05.00	0003529440.30	04.350	000	-01326406.00	00140.00	.400	.600	000000.99	-.420	-0.390	0.00	001.02	-036.18	.9900	1
00230	0.0000	09.33	0120042205.00	11.300	013	00609340.67	00184.67	.500	.500	002466.33	.020	0.070	0.00	001.27	-011.20	.0300	1
00240	0.4300	09.67	0053177044.00	14.290	000	02981014.30	01876.70	.990	.990	013321.30	.040	0.050	0.78	002.69	011.40	.9900	1
00250	0.0000	08.00	0011489790.00	14.190	000	005763.38.00	006.8.00	.625	.375	002536.00	.020	0.140	0.00	000.99	010.41	.9900	1
00260	0.0000	04.00	0002097[illegible]00.00	00.375	000	-00163000.00	00000.00	.990	.990	000000.99	-.070	-0.040	0.00	001.22	-000.03	.9900	1
00270	0.6000	13.67	0040099125.00	10.940	000	01007314.30	02400.00	.270	.730	006901.00	.060	0.130	0.95	001.71	016.90	.1000	1
00280	0.0000	07.00	0237437000.00	15.270	000	15014667.00	02964.30	.670	.330	004472.00	.050	0.130	0.00	002.41	005.47	.0050	1
00290	0.5200	08.67	0004140519.70	14.150	001	00329130.00	00477.50	.450	.550	006435.70	.080	0.110	0.03	007.45	039.57	.0200	1
00300	0.4000	12.67	0100275924.00	27.150	004	04410404.30	04043.33	.500	.500	000109.70	.040	0.100	0.34	002.63	024.02	.0020	1
00310	0.0000	10.00	0022403677.00	75.270	000	02914366.30	01823.30	.200	.800	005250.00	.050	0.690	0.00	001.20	063.19	.0030	1
00320	0.0000	09.67	0015439755.00	04.640	019	-01266207.70	00745.00	.520	.480	003026.50	-.090	00.990	0.00	001.15	002.67	.9900	0
00330	0.0125	12.33	0015430924.00	31.210	013	-07011097.00	44656.00	.270	.730	050592.33	-.010	-0.030	0.87	002.39	020.42	.9900	0
00340	0.6000	06.33	0002242868.70	00.800	000	00176666.67	00083.00	.450	.550	004657.50	.120	0.180	0.00	001.72	014.12	.3100	0
00350	0.2000	06.67	0056736213.00	18.500	000	01329070.70	04111.67	.600	.400	003561.00	.050	0.090	3.45	002.24	380.48	.1900	0
00360	0.3100	04.00	0017589421.00	07.900	000	02001317.70	00920.00	.670	.330	002698.00	.070	0.140	0.29	003.43	009.19	.9900	0
00370	0.0400	13.00	0001974560.00	10.270	000	00201241.00	00031.00	.100	.020	004223.67	.020	0.050	0.35	000.99	059.94	.2300	0
00380	1.0000	11.67	0000918691.00	21.150	010	02000463.30	04656.00	.100	.000	007711.67	.060	0.080	0.61	002.33	011.65	.9900	0
00390	0.0000	10.33	0598058905.40	02.230	000	-05677574.70	07733.33	.360	.640	012290.00	-.050	-0.060	0.00	001.52	-000.14	.9900	0
00400	0.0000	11.00	0476459221.70	01.900	000	-01383633.30	05133.33	.270	.730	010961.50	-.020	-0.070	0.00	001.44	004.74	.0300	0
00410	0.4400	12.00	0040356457.00	17.820	007	01065350.30	02162.00	.310	.690	003812.50	.070	0.100	0.12	003.43	000.36	.1100	0
00420	0.0000	06.33	0047250967.00	14.250	000	00743064.33	03033.33	.500	.420	003636.00	.030	0.070	0.00	001.20	016.32	.4000	0
00430	0.0000	07.00	0012911667.00	04.900	004	00200333.33	00472.67	.430	.570	004301.33	.010	0.040	0.00	001.76	025.30	.3100	0
00440	0.0000	19.33	0063164104.00	05.060	000	-03642000.00	04500.00	.230	.770	002515.00	-.010	-0.030	0.00	000.60	-000.47	.9900	0
00450	0.0000	17.67	0062870066.00	09.690	000	-02071490.70	04074.30	.210	.790	002515.50	-.010	-0.030	0.00	000.62	0000.99	.9900	0
00460	0.0000	16.00	0062476062.00	15.580	000	-02420208.00	04076.00	.210	.790	002516.00	-.010	-0.020	0.00	000.65	0000.99	.9900	0
00470	0.1500	07.33	0050451603.00	26.000	001	-03675026.70	02250.00	.560	.440	000000.99	-.130	-3.790	0.27	001.25	052.34	.1400	0
00480	0.9700	08.00	0013998300.00	12.500	999	-00974566.70	00516.70	.280	.720	005733.30	-.130	-0.430	00.99	001.23	009.32	.9900	0

00490	0.6700	08.67	0026010670.00	14.560	000	00603623.30	01810.50	.390	.610	003315.00	.030	0.050	0.77	002.56	016.97	.0800	0
00500	0.3250	09.67	0007093965.30	07.000	000	00354531.70	05100.40	.410	.590	001443.40	.030	0.090	0.59	001.32	012.75	.0400	0
00510	2.0000	09.00	0022082042.00	30.040	001	01971026.30	00075.00	.630	.370	002247.50	.120	0.130	0.07	005.40	013.23	.2700	0
00520	0.0900	07.00	0000020307.30	01.960	000	-00076070.00	00000.99	.990	.990	002969.50	-.030	00.990	0.00	026.90	0000.99	.9900	0
00530	0.4300	12.00	0071094666.70	20.270	004	-01443000.00	03616.70	.500	.420	009962.70	-.010	-0.030	0.27	002.26	011.05	.0600	0
00540	0.0100	11.33	0024059723.00	13.210	000	00610694.50	00000.99	.200	.000	007915.00	.003	0.010	-0.01	000.99	-000.20	.9900	0
00550	0.0000	09.00	0019459040.00	02.330	001	-01500492.70	01025.00	.370	.630	007450.00	-.100	-0.460	0.00	001.29	-002.60	.1700	0
00560	0.4300	07.67	0010751667.00	16.300	000	02067666.70	00290.30	.360	.640	001927.30	.200	0.290	0.39	005.51	016.10	.0600	0
00570	0.1200	06.33	0008671720.70	08.500	000	00150400.67	00360.67	.440	.560	005024.67	.030	0.040	0.23	004.46	011.30	.2000	0
00580	0.1700	09.00	0012392529.00	10.960	004	00265042.70	00493.70	.440	.560	000766.00	.030	0.050	0.15	002.04	016.24	.3700	0
00590	0.9900	00.99	0005201595.30	07.710	000	0000000000.99	00361.50	.990	.990	005916.70	0.990	00.990	00.99	000.99	0000.99	.9900	0
00600	0.9700	12.00	0204324666.70	23.360	009	09852666.70	12345.70	.170	.830	016197.70	.040	0.070	0.40	002.80	009.69	.9700	0
00610	0.0000	00.00	0004607254.00	08.610	001	00294140.60	00440.30	.290	.210	004510.70	.070	0.090	0.00	004.64	062.56	.4100	0
00620	0.0000	06.67	0012741234.00	09.230	002	-00202142.00	00298.50	.570	.430	002730.50	-.020	-0.100	0.00	002.39	173.57	.3700	0
00630	0.0000	00.33	0040014731.00	12.270	002	00075371.70	02615.00	.160	.840	004100.00	.030	0.050	0.00	004.34	044.70	.9900	0
00640	0.4000	07.00	0002157467.00	22.420	007	00530072.43	00010.00	.430	.570	002355.00	.120	0.200	1.03	005.62	036.54	.4400	0
00650	0.0000	00.99	0001572536.00	00.990	000	-00018055.50	00092.50	.990	.990	000452.00	-.030	00.990	0.00	007.40	0000.99	.9900	0
00660	2.1500	05.00	0017601000.00	44.420	000	01542000.00	00000.99	.600	.400	000000.99	.120	0.130	0.01	022.17	016.97	.9900	0
00670	0.0000	00.67	0000225172.00	07.310	000	00049994.33	00000.99	.220	.780	004515.50	.010	0.010	0.00	235.97	002.96	.5900	0
00680	0.4000	11.33	0591502317.00	20.300	015	15664586.00	20344.00	.350	.650	101659.50	.030	0.050	0.52	002.94	025.83	.0020	0
00690	0.9000	12.33	0255400666.70	34.980	999	00041666.70	01261.33	.480	.520	010666.50	.040	0.080	0.03	001.65	003.06	.0700	0
00700	0.9750	06.00	0002135772.00	15.440	000	00371612.00	00004.00	.170	.830	004105.00	.020	0.040	1.31	004.00	021.02	.2600	0
00710	0.2000	07.33	0023049233.00	13.690	000	00051046.70	00996.70	.680	.320	001275.00	.050	0.070	0.77	003.96	047.63	.9900	0
00720	0.0375	07.67	0020629000.00	13.000	001	00706333.33	00017.00	.700	.300	001912.00	.040	0.070	0.07	001.42	040.24	.2100	0
00730	1.0300	13.00	0020010000.00	13.000	000	02552666.70	00720.50	.310	.690	005042.50	.100	0.150	0.83	000.97	010.33	.0300	0
00740	0.9900	19.67	0003514250.00	00.990	000	00117579.33	00000.99	.160	.840	000000.99	.020	0.150	00.99	000.13	0000.99	.9900	0
00750	0.2000	07.00	0026791426.00	20.630	000	01099600.00	00907.00	.430	.570	000852.70	.070	0.140	0.25	003.11	017.38	.2000	0
00760	0.0000	00.99	0000547917.70	00.990	999	-00972757.70	00120.00	.990	.990	000000.00	-.400	00.990	0.00	000.87	0000.99	.9900	0
00770	0.9500	10.00	0003346668.30	29.960	031	12613662.00	16000.00	.260	.740	072031.33	.005	0.008	2.40	002.14	093.05	.0009	0
00780	0.2000	07.33	0012133135.00	04.150	999	00535620.00	00063.00	.540	.460	002466.70	.060	0.080	0.31	002.39	006.46	.1600	0
00790	0.4000	07.33	0020004500.00	13.520	002	00703347.70	01011.00	.060	.140	001727.00	.050	0.110	0.54	001.07	015.15	.2400	0
00800	0.0000	04.33	0016527004.00	11.110	006	00091304.30	00467.70	.530	.470	002066.70	.004	0.010	0.00	000.99	025.71	.1700	0
00810	0.0000	07.00	0004012634.00	04.130	000	-00334102.70	00334.50	.300	.620	000993.00	-.000	-0.000	0.00	006.57	-004.14	.1000	0
00820	1.5200	13.67	0171804333.30	36.420	158	00473333.30	00716.70	.300	.700	014150.00	.010	0.100	0.59	002.19	013.70	.0020	0
00830	0.3000	06.33	0066444274.00	22.460	004	02067791.00	01601.30	.420	.580	002907.50	.070	0.120	0.33	002.66	022.74	.1000	0
00840	1.1000	11.67	0120777609.30	37.290	000	13142020.00	01025.00	.310	.690	009039.33	.050	0.120	0.40	000.70	016.86	.0090	0
00850	1.2500	09.00	2012020000.00	32.320	023	34260667.00	29166.67	.450	.550	024075.70	.040	0.100	0.40	001.32	010.44	.0090	0
00860	0.0000	11.00	0098426146.30	11.150	000	-05599361.00	09454.30	.300	.700	010022.70	-.010	-0.020	0.00	000.04	-001.85	.0040	0
00870	1.3300	08.67	0053412363.00	31.340	000	00371423.70	03601.30	.350	.650	001409.30	.010	0.020	2.54	001.80	049.57	.9900	0
00880	0.1600	07.67	0102053666.70	06.830	022	02366333.30	06519.67	.520	.480	012711.00	.030	0.060	0.31	002.42	014.05	.0070	0
00890	0.1800	05.67	0042398334.00	05.520	000	01170000.00	01506.00	.720	.280	002023.00	.040	0.080	0.37	005.08	015.11	.1100	0
00900	0.0000	06.67	0021103032.00	06.710	002	00321775.33	00400.00	.550	.450	002017.30	.020	0.040	0.00	001.69	025.05	.0600	0
00910	0.1100	06.33	0021239461.00	24.090	005	-01614900.00	01800.00	.630	.370	009000.00	-.030	-0.070	-0.03	002.25	-011.48	.2000	0
00920	0.2200	07.00	0013364430.00	08.350	000	00327159.70	00000.99	.520	.480	000000.99	.020	0.030	-0.67	001.60	-016.63	.9900	0
00930	0.0000	07.67	0165162666.70	20.040	012	00020333.30	02629.50	.870	.130	003084.00	.060	0.140	0.00	001.96	005.90	.3400	0
00940	0.0000	07.33	0026520334.00	16.310	000	00006711.33	01700.00	.400	.600	004500.00	.003	-0.007	0.00	001.73	331.96	.0600	0

00750	0.5000	14.33	0179119003.70	24.730	104	-29617173.00	09733.30	.280	.720	020000.00	-.120	-0.480	0.23	002.91	002.01	.00[illegible]
00960	0.2000	07.33	0076618000.00	16.800	008	00513000.00	03166.70	.340	.660	004166.67	.020	0.050	0.38	001.42	024.72	.9900
00970	0.0000	09.00	0015416000.00	02.160	004	-00791233.33	01600.00	.410	.590	002766.67	-.030	-0.090	0.00	001.47	006.54	.99[illegible]
00980	0.0000	09.00	0040032333.00	01.510	004	-00649333.33	01500.00	.330	.670	002166.67	-.030	-0.130	0.00	001.66	-001.12	.11[illegible]
00990	0.2000	06.00	0011839901.00	03.690	000	00295004.00	00575.00	.670	.330	001132.50	.030	0.050	0.34	003.71	005.27	.1[illegible]
01000	0.0000	04.67	0014299179.00	08.400	000	01111215.30	01875.00	.303	.700	0033[illegible]1.50	.040	0.140	0.00	003.45	007.[illegible]	.1[illegible]
01010	0.4000	14.00	0116402000.00	09.040	002	01489765.70	[illegible]	.500	.400	016079.0[illegible]	.020	0.0[illegible]0	-4.45	[illegible].60	-15[illegible]	[illegible]
01020	0.1400	[illegible].67	0022575667.00	03.500	[illegible]	[illegible]	00725.00	.270	.770	00[illegible]03.00	.130	0.220	0.31	001.02	007.[illegible]	[illegible]

[a]Successful (1)/Unsuccessful (0)

Notes:

X_1 - Rate of return on assets.
X_2 - Rate of return on equity.
X_3 - Net income.
X_4 - Dividend payout rate.
X_5 - Annual cash dividends per share of common stock.
X_6 - Average market value per share of common stock for a given 12 month period.
X_7 - Current ratio.
X_8 - Price-earnings ratio.
X_9 - Dollar value of sales.
X_{10} - Number of employees.
X_{11} - Number of common stockholders of recored.
X_{12} - Percentage of management and director ownership of common stock.
X_{13} - Board size.
X_{14} - Percentage of inside directors.
X_{15} - Percentage of outside directors.
X_{16} - Number of corporate offices, plants, and/or subsidiaries located outside the U.S.

Missing values are indicated by 999, .99, .990, or .9900.

Appendix C

[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
+.0[illegible]2	.0[illegible]3	[illegible]03
-.[illegible]30	[illegible]	[illegible]60
-.0[illegible]60	.[illegible]60	-.[illegible]10
.00[illegible]	+.[illegible]30	.[illegible]40
.040	-.[illegible]20	.030
.[illegible]50	[illegible]	.020
.0[illegible]0	.0[illegible]0	.050
-.020	.010	.040
+.120	-.01[illegible]	.210
[illegible]	-.010	.070
.04[illegible]	-.010	.060
.020	-.[illegible]30	.[illegible]
+.070	-.[illegible]70	.050
.[illegible]30	.06[illegible]	.0[illegible]0
.[illegible]50	.[illegible]00	-.[illegible]50
.[illegible]	.[illegible]20	.[illegible]70
.[illegible]20	+.030	.[illegible]40
.0[illegible]0	-.0[illegible]0	.[illegible]30
	.003	.050
	-.[illegible]	.[illegible]40
	.[illegible]70	.060
	.[illegible]20	.[illegible]30
	.030	.002
	.040	.[illegible]10
	.[illegible]20	.[illegible]20
	-.020	-.[illegible]40
	.030	.030
	.120	.170
	-.030	.060
	.120	.140
	.010	.0[illegible]8
	.030	-.[illegible]60
	.040	.040
	.020	.150
	.050	.020
	.0[illegible]0	.0[illegible]0
	.100	-.[illegible]40
	.020	.050
	.070	.040
	-.[illegible]00	.0[illegible]0
	.[illegible]05	.050
	.050	.050
	.050	.[illegible]50
	.[illegible]04	.[illegible]10

-.080	.150
.040	.070
.070	-.350
.050	.020
.040	.006
-.010	-.020
.010	.006
.030	.080
.040	.380
.020	.150
-.030	.010
.020	.100
.060	-.110
.[illegible]03	.050
-.120	.140
.020	.050
-.030	.060
-.050	.020
.050	.010
.050	.020
.020	-.010
.120	.020
	.040

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[a]Rate of return on assets in corporations which have had a successful control contest (n=23).

[b]Rate of return on assets in corporations which have had an unsuccessful control contest (n=70).

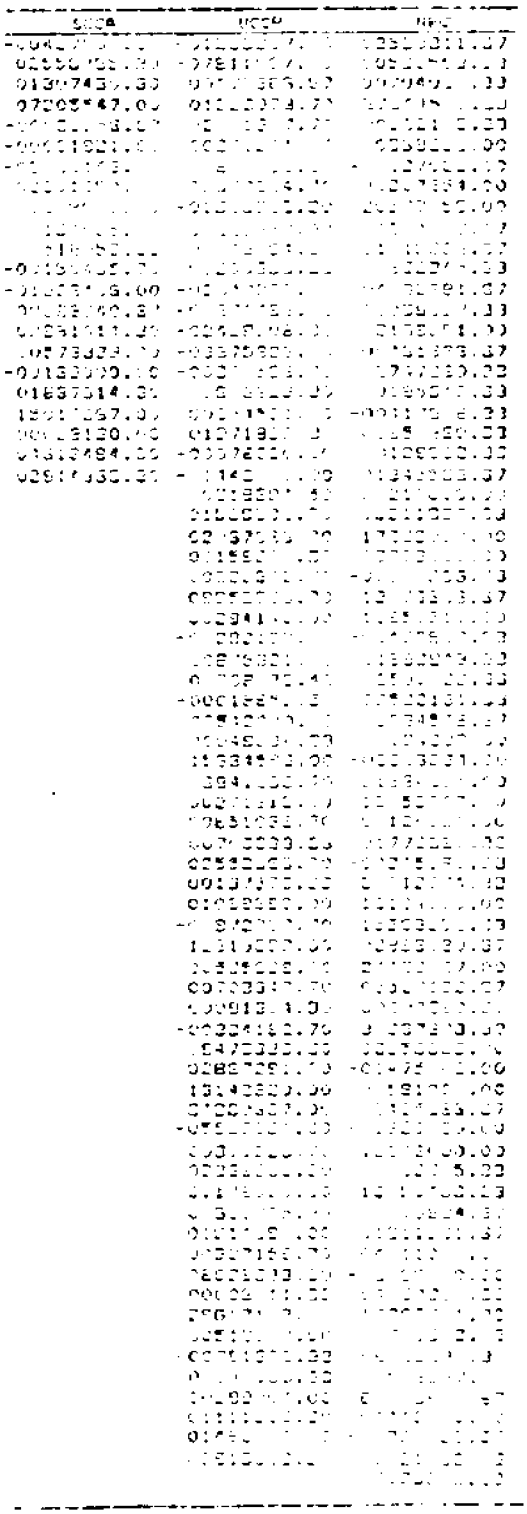
[c]Rate of return on assets in corporations which have not had a proxy contest (n=71).

SCC[a]	UCC[b]	NPC[c]
[illegible]	[illegible]	.020
[illegible]	[illegible]	.090
.08[illegible]	[illegible]	.080
[illegible]	[illegible]	.110
-.17[illegible]	[illegible]	.110
.150	[illegible]	.030
.110	-0.130	-.079
.050	[illegible]	.050
[illegible]	0.100	.130
-.230	0.070	.050
.070	0.040	.030
.05[illegible]	[illegible]	[illegible]
.140	-0.020	.250
-.240	-0.020	.030
.150	[illegible]	.110
.150	-0.410	-.010
.110	0.050	.100
.100	[illegible]	.040
.090	0.130	-.080
	-0.030	.110
	0.010	.030
	-0.450	.040
	0.220	.270
	0.020	.180
	0.050	.110
	0.070	.220
	0.05[illegible]	-.002
	-0.130	.190
	0.050	.020
	0.100	-.140
	0.120	.050
	0.010	.230
	0.050	.170
	0.060	.210
	0.040	-.150
	0.070	-.110
	0.070	.110
	0.130	.200
	0.150	.040
	0.140	.160
	0.002	-.050
	0.030	.050
	0.110	.140
	0.010	.100
	-0.090	.030
	0.100	.180
	0.120	.230
	0.120	.170
	0.100	.200
	-0.020	.030
	0.020	-.010
	0.030	.110
	0.080	.008
	0.040	-.110
	-0.070	.120
	0.020	.120
	0.140	.160
	-0.007	.160
	-0.420	.100
	0.050	.120
	[illegible]	[illegible]
	-0.130	.030
	0.050	.210
	0.140	.070
	0.150	.110
	0.220	.020
		[illegible]
		.040
		-.170
		.050
		.110

[a] Rate of return on equity [illegible] successful [illegible]

[b] Rate of re[illegible] an [illegible]

[c] Rate [illegible] from control [illegible]



[illegible][a]	[illegible][b]	[illegible][c]
[illegible]	[illegible]	[illegible]1.11
[illegible].3[illegible]	72.2[illegible]	[illegible].57
25.920	00.852	[illegible].02
13.150	15.5[illegible]	[illegible].11
03.250	07.[illegible]	309.20
00.740	10.2[illegible]	034.32
02.640	21.750	[illegible].13
13.3[illegible]0	02.220	002.04
21.550	01.220	025.54
25.570	17.820	023.23
21.220	14.[illegible]	[illegible].05
04.250	04.200	005.94
01.250	05.250	052.38
11.380	09.220	[illegible]1.53
14.250	15.[illegible]	175.17
14.150	23.[illegible]	027.36
00.375	12.5[illegible]	003.06
10.540	14.220	063.52
15.270	07.900	007.10
14.150	30.010	032.79
27.150	01.500	010.58
75.270	20.270	012.19
	13.210	025.92
	02.320	023.04
	15.230	032.15
	08.500	011.07
	10.930	008.79
	07.710	035.54
	23.360	011.05
	02.310	005.73
	09.230	044.42
	12.270	024.37
	72.420	052.73
	44.120	022.50
	07.230	004.97
	20.530	005.29
	34.230	024.54
	15.440	051.23
	12.390	003.78
	12.500	022.75
	12.000	002.23
	20.240	032.23
	25.95[illegible]	002.07
	04.150	051.03
	13.520	024.21
	11.110	053.71
	04.130	047.33
	36.420	007.48
	22.460	028.02
	37.250	051.73
	22.320	001.83
	11.150	002.21
	21.340	013.55
	06.530	007.42
	05.520	017.22
	06.710	026.25
	24.090	042.75
	09.350	191.67
	20.040	057.67
	13.210	012.34
	24.720	002.29
	16.890	041.45
	02.150	031.23
	01.510	014.58
	03.590	034.04
	02.460	007.02
	05.640	043.57
	08.300	004.53
		004.25
		006.71
		011.90

[a] Average market value per share of common stock for a given 12 month period in corporations which [illegible]
[b] Average market value per share of common stock for a given 12 month period in corporations which have [illegible]
[c] [illegible]

REFERENCES

REFERENCES

Alchian, A. A. Uncertainty, evolution, and economic theory. Journal of Political Economy, June, 1959, 211-221.

Annual Reports of the Securities and Exchange Commission (22nd-43rd). Washington, D.C.: U.S. Government Printing Office, 1956-1977.

Aranow, E. R., & Einhorn, H. A. Proxy contests for corporate control. New York: Columbia University Press, 1968.

Aranow, E. R., & Einhorn, H. A. Tender offers for corporate control. New York: Columbia University Press, 1973.

Austin, D. V. The causes of proxy contests: an empirical study, 1956-60. (Doctoral dissertation, Indiana University, 1964). Dissertation Abstracts International, 1964, 25, 2805A. (University Microfilms No. 64-12,000)

Austin, D. V. Proxy contests and corporate reform. Ann Arbor, Michigan: Bureau of Business Research, The University of Michigan, 1965.

Bacon, J. Corporate directorship practices: membership and committees of the board. New York: The Conference Board, 1973.

Baker, J. C. Directors and their functions: a preliminary study. Andover, Mass.: The Andover Press, 1945.

Baumol, W. J. The stock market and economic efficiency. New York: Fordham University Press, 1965.

Baumol, W. J. Business behavior, value and growth (rev. ed.). New York: Harcourt, Brace & World, Inc., 1967.

Baumol, W. G., & Blinder, A. S. Economics: principles and policy. New York: Harcourt, Brace, Jovanovich, 1979.

Becker, G. S. Irrational behavior and economic theory. Journal of Political Economy, February, 1962, 1-13.

Berle, A., Jr. The 20th century capitalist revolution. New York: Harcourt & Brace, 1954.

Berle, A., Jr., & Means, G. C. The modern corporation and private property. New York: Macmillan, 1932.

Blumberg, P. Who belongs on corporate boards? Business and Society Review/Innovation, Spring, 1973(5), 40-47.

Boulding, K. E., & Spivey, W. A. Linear programming and the theory of the firm. New York: The Macmillan Company, 1960.

Broadcasting, Cooke gains time in proxy battle, November 29, 1971, p. 74. (a)

Broadcasting, Bodycount needed for fox battle, May 24, 1971, pp. 53-54. (b)

Broadcasting, A new dispute at troubled Herald-Traveler, June 5, 1972, pp. 52-53.

Broehl, W. G. The proxy battle: challenge to management-stockholder relations. Hanover, N.H.: The Amos Tuck School of Business Administration, 1955.

Brown, J. K. The board of directors and its work routine. The Conference Board Record, March, 1972, 9, 36-42.

Burch, P. H., Jr. The managerial revolution reassessed. Lexington, Mass.: Heath, 1972.

Business Week, The proxy wars flare up anew, May 15, 1971, p. 50.

Business Week, A proxy challenge to Great Western, September 16, 1972, p. 31. (a)

Business Week, The proxy fight at Liberty Leasing, May 20, 1972, pp. 30-31. (b)

Business Week, Consumers battle for board seats, April 28, 1973, p. 45.

Business Week, The simmering proxy fight at Cook United, March 23, 1974, p. 24.

Business Week, 'A menu of options' in a bid for Kennecott, April 3, 1978, pp. 24-25. (a)

Business Week, Proxy bid for Kennecott, April 19, 1978, p. 44. (b)

Business Week, Pullman's proxy fight, May 8, 1978, p. 50. (c)

Chevalier, J. M. The problem of control in large American corporations. The Antitrust Bulletin, Spring, 1969, XIV, pp. 163-180.

Clendenin, W. D. Company presidents look at the board of directors. California Management Review, Spring, 1972, XIV, pp. 60-66.

Cole, R. J. 10% stake is bought in Kennecott Copper by Curtiss-Wright, New York Times, March 14, 1978, pp. 47-48. (a)

Cole, R. J. S.E.C. said to study proxy war of Kennecott and Curtiss-Wright, New York Times, March 31, 1978, p. D11. (b)

Cooley, W. E., & Lohnes, P. R. Multivariate data analysis. New York: Wiley, 1971.

Copeland, M. T., & Towl, A. R. The board of directors and business management. Andover, Mass.: The Andover Press, 1947.

Dahrendorf, R. Class and class conflict in industrial society. Stanford, California: Stanford University Press, 1959.

Delaware Revised Code, Delaware General Corporation Law, 1974.

Directory of Companies Required to File Annual Reports with the Securities and Exchange Commission. Washington, D.C.: U.S. Government Printing Office, 1964-1978.

Eisenberg, M. A. Access to proxy machinery. Harvard Law Review, 1970, 83, p. 1489.

Fisher, R. A. The use of multiple measurements in taxonomic problems, Annals of Eugenics, 1936, 7, 179-188.

Fortune, Kennecott after the battle, June 5, 1978, pp. 124-130.

Frane, J. W. A note on checking tolerance in matrix inversion and regression, Technometrics, November, 1977, 19, 513-514.

Frank, R. E., Massy, W. F., & Morrison, D. G. Bias in multiple discriminant analysis, Journal of Marketing Research, August, 1965, II, 250-258.

Friedman, M. Essays in positive economics. Chicago: University of Chicago Press, 1953.

Galbraith, J. K. The new industrial state (2nd ed.). Boston: Houghton Mifflin Company, 1971.

Glueck, E. G. Foundations of personnel. Dallas, Texas: Business Publications, Inc., 1979.

Goldstein, M., & Dillon, W. R. Discrete discriminant analysis. New York: Wiley, 1978.

Gordon, R. A. Business leadership in the large corporation. Berkeley, California: University of California Press, 1966.

Groobey, J. A. Making the board of directors more effective. California Management Review, Spring, 1974, XVI, 25-34.

Hicks, C. R. Fundamental concepts in the design of experiments. New York: Holt, Rinehart and Winston, 1973.

Hull, C. H., & Nie, N. H. SPSS update: new procedures and facilities for releases 7 and 8. New York: McGraw-Hill Book Company, 1979.

Karen, R. M. Tough raiders play tender games, Public Relations Journal, September, 1976, 32, 10-13; 32.

Karr, D. Fight for control. New York: Ballantine Books, 1956.

Klecka, W. R. Discriminant analysis. In N. H. Nie, C. H. Hull, J. G. Jenkins, K. Steinbrenner, & D. H. Bent (Eds.), Statistical package for the social sciences (2nd ed.). New York: McGraw-Hill Book Company, 1975.

Knowles, J. C. The Rockefeller financial group (Module 343). Andover, Mass.: Warner Modular Publications, 1973.

Koontz, H. The board of directors and effective management. New York: McGraw-Hill, 1967.

Kreps, J. M. How boards began. Forbes, May 15, 1976, 117, 134-136.

Larner, R. J. Ownership and control in the 200 largest non-financial corporations, 1929 and 1963. The American Economic Review, September, 1966, 56, 777-787.

Laube, R. H. The relationship between some characteristics of corporate boards and operational results. (Doctoral dissertation, The University of Nebraska, 1966). Dissertation Abstracts International, 1967, 27, 3196-A. (University Microfilms No. 67-4071)

Lipsey, R. G., & Steiner, P. O. Economics (third edition). New York: Harper & Row, 1972.

Lirtzman, S. I. Personal correspondence to the author, February 6, 1981.

Louden, J. K. The effective director in action. New York: American Management Association, 1975.

Lundberg, F. America's sixty families. New York: Citadel, 1946.

Lundgren, E. F. Organizational management: systems and process. San Francisco: Canfield Press, 1974.

Mace, M. L. Directors: myth and reality. Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1971.

Mace, M. L. The president and the board of directors. Harvard Business Review, March-April, 1972, 50, 37-49.

Marris, R. L. The economic theory of "managerial" capitalism. New York: Free Press of Glencoe, 1964.

Massaro, V. G. The equity market: corporate practices and issues. New York: The Conference Board, 1979.

Meade, J. E. Is "the new industrial state" inevitable? Economic Journal, June, 1968, 372-392.

Metcalf, L., & Reinemer, V. Unmasking corporate ownership. Nation, July 19, 1971, 38-40.

Miller, A. N. Perspectives on boards of directors: a review of empirical research, Unpublished position paper, Baruch College, City University of New York, 1978.

Miner, J. B. The management process: theory, research, and practice (2nd ed.). New York: The Macmillan Company, 1978.

Nader, R., Green, M., & Seligman, J. The myth of corporate democracy, The Washington Monthly, July-August, 1976, 54-61. (a)

Nader, R., Green, M., & Seligman, J. Who rules the giant corporation? Business and Society Review, Summer, 1976, 40-48. (b)

Nation's Business, The new proxy warfare, August, 1971, pp. 58-63.

New York Times, Dilbert's control won by dissidents in a proxy battle, February 4, 1967, pp. 31; 35.

New York Times, Curtiss-Wright seeks support for new slate, April 5, 1978, p. D7.

Nicholson, W. Intermediate microeconomics and its application. Hinsdale, Ill.: The Dryden Press, 1975.

Nie, N. H., Hull, C. H., Jenkins, J. G., Steinbrenner, K., & Bent, D. H. Statistical package for the social sciences (2nd ed.). New York: McGraw-Hill Book Company, 1975.

Parsons, T. A revised analytical approach to the theory of social stratification. In Class, status, and power, edited by Reinhard Bendix and S. M. Lipset, Glencoe, Ill.: Free Press, 1953.

Parsons, T., & Smelser, N. Economy and society. London: Routeledge & Kegan-Paul, 1957.

Patman Staff Report. Commercial banks and their trust activities: emerging influence on the American economy. U.S. Congress, House Committee on Banking and Currency, Domestic Finance Committee. 90th Congress, 2nd session. Washington, D.C.: U.S. Government Printing Office, 1968.

Perham, J. C. Return of the proxy war, Dun's Review, August, 1979, 58-60.

Perlo, V. The empire of high finance. New York: International, 1957.

Pfeffer, J. Size and composition of corporate boards of directors: the organization and its environment, Administrative Quarterly, June, 1972, 17, 219-228.

Ricardo, D. The principles of political economy and taxation. London: J. M. Dent & Sons, Ltd., 1911.

Rochester, A. Rulers of America. New York: International, 1936.

Schwab, P. Portrait of the mature proxy fighter, Nation's Business, October, 1979, 64.

Seligman, J. Our corporate commissars, The Nation, June 12, 1976, 222, 709-713.

Seligman, J. The Securities and Exchange Commission and corporate democracy, University of Dayton Law Review, Winter, 1978, 3(1), 1-21.

Shapiro, H. J. Personal correspondence to the author, July 14, 1980.

Sheehan, R. There's plenty of privacy left in private enterprise. Fortune, July 15, 1966, 224-225; 327-328; 332; 334; 343; 348.

Sheehan, R. Proprietors in the world of big business. Fortune, June 15, 1967, 178-183; 242.

Simon, H. A. Models of man. New York: John Wiley & Sons, Inc., 1957.

Simon, H. A. Rational decision making in business organizations, The American Economic Review, September, 1979, 69, 493-513.

Singh, A., & Whittington, G. Growth, profitability, and valuation: a study of United Kingdom quoted companies. Cambridge, England: The Cambridge University Press, 1968.

Smith, A. The wealth of nations. New York: P. F. Collier & Son, 1905.

Sweezy, P. M. Interest groups in the American economy, in The present as history. New York: Monthly Review Press, 1953.

Tatsuoka, M. M. Multivariate analysis. New York: Wiley, 1971.

Tintner, G. The theory of choice under subjective risk and uncertainty, Econometrica, 9, 1941, 298-304. (a)

Tintner, G. The pure theory of production under technological risk and uncertainty, Econometrica, 9, 1941, 305-311. (b)

United States Congress, Senate Committee on Banking and Currency. Hearings before subcommittee on Stock market study, corporate proxy contests, S879. 84th Congress, 1st session, June 1, 2, 8, 9, and 15, 1955; July 5, and 6, 1956. Washington, D.C.: U.S. Government Printing Office, 1956.

Van Horne, J. C. Financial management and policy (second edition). Englewood Cliffs, N.J.: Prentice-Hall, 1971.

Walker, R. Proxy count at Dilbert's drags as both sides scrutinize ballots, New York Times, January 28, 1967, p. 33.

Wall Street Journal, Universal Container's management opposed in a proxy battle, June 6, 1975, p. 6.

Wall Street Journal, Curtiss-Wright signals its plans for Kennecott, March 24, 1978, p. 2. (a)

Wall Street Journal, Curtiss-Wright discloses its candidates for seats on Kennecott Copper's board, March 28, 1978, p. 6. (b)

Wall Street Journal, Utah judge sets decision, March 31, 1978, p. 23. (c)

Wattel, H. L. (ed.). Proxy fights as managerial revolutions. Hempstead, New York: Hofstra University Yearbook of Business, 1966.

Weiss, E. Proxy voting on social issues: a growth industry, Business and Society Review. Autumn, 1974, 16-22.

Whetten, L. C. The proxy contest: its nature, cause, and significance. Unpublished doctoral dissertation, University of Alabama, 1957.

Whetten, L. C. Recent proxy contests: a study in management-stockholder relations. Atlanta, Georgia: Bureau of Business and Economic Research, School of Business Administration, Georgia State College of Business Administration, 1959.

Whitbeck, V. S., & Kisor, M., Jr. A new tool in investment decision-making, Financial Analysts Journal, May-June, 1963, 52-62.

Winer, B. J. Statistical principles in experimental design (2nd ed.). New York: McGraw-Hill, 1971.

Zeitlin, M. Corporate ownership and control: the large corporation and the capitalist class. American Journal of Sociology, March, 1974, 79, 1073-1119.