

AN ANALYSIS OF THE VARIABLES AFFECTING A
COMPANY'S DECISION IN THE CHOICE OF MARKETS
FOR ITS COMMON STOCK

Thesis for the Degree of Ph. D.

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This is to certify that the

thesis entitled

AN ANALYSIS OF THE VARIABLES AFFECTING A
COMPANY'S DECISION IN THE CHOICE OF MARKETS
FOR ITS COMMON STOCK

presented by

Waldemar Melvin Goulet

has been accepted towards fulfillment
of the requirements for

Ph. D. degree in Finance

A handwritten signature in cursive script, reading "Alan E. Samuel".

Major professor

Date February 22, 1973



ABSTRACT

AN ANALYSIS OF THE VARIABLES AFFECTING A COMPANY'S DECISION IN THE CHOICE OF MARKETS FOR ITS COMMON STOCK

By

Waldemar Melvin Goulet

Most decision making activity of the firm takes place under conditions of uncertainty and is predicated upon management's beliefs or expectations. The effects of an exchange listing on a company's common stock are unknown until after the decision is made and listing takes place. It would seem, then, that the listing decision emanates from expectations held by management.

The purpose of this research is to learn more about the theory of the firm that relates to the decision to list or refrain from listing common stock on a national exchange. This study investigates the listing decision activity of firms which listed in 1969 or 1970 on the American or the New York Stock Exchanges and firms which have been eligible since mid-1969 for either of these exchanges but have refrained from listing.

The research investigates: 1) the variables that are evaluated by firms, 2) those variables given the greatest emphasis in the choice of markets, 3) which individuals or groups have the strongest influence on the listing decision,

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and 4) the development of a multiple discriminant function that classifies firms as either "listers" or "non-listers."

The research is based on 311 responses to a mail questionnaire survey undertaken between August, 1971 and December, 1971 of companies located in 43 different states and the District of Columbia. The findings were subjected to the following multivariate techniques: cluster analysis was used to determine the "natural" groupings of variables by which a market is judged by corporate executives; factor analysis was used to determine the "strength" (greatest emphasis) of the overall relationships among these variables; and multiple discriminant analysis was used to predict group membership.

The findings show that the variables given the greatest emphasis in the choice of markets are: transactions (volume of sales); loss of sales support; reporting requirements to stockholders, to the public, and to the exchange; company's credit rating, and access to capital markets.

The groups and individuals who tend to have the strongest influence on the listing decision are: the board of directors, the company president (occasionally a vice president), and institutional investors.

Other variables and opinions, when added to the above cited items, can be utilized in a multiple discriminant function to classify correctly approximately 90 percent of the unlisted and listed company questionnaire respondents.

Executive responses tend to parallel the advantages of

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listing which appear in the financial literature and textbooks. Executive responses; however, are not in agreement with certain of the stated disadvantages of listing.

Executives do not regard reporting requirements as "onerous," are not interested in a voluntary delisting option, and tend not to consider listing expenses as an important portion of the listing decision.

The results of the listing decision process do not appear to stem from positive versus negative expectations as executives of both unlisted and listed companies tend to hold positive (or neutral) expectations regarding the efficacy of an exchange listing. The decision to market the company's common stock on an exchange emanates from the higher and more positive expectations held by executives of listed companies.

AN ANALYSIS OF THE VARIABLES AFFECTING A
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By

Waldemar Melvin Goulet

A THESIS

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DEDICATION

This dissertation is dedicated to
the people of the United States of America
who through their sacrifices and beliefs
created the environment and institutions
which made possible my education.

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The writing of a dissertation is a learning process which facilitates the student's entry into original and creative areas. It does this by requiring the integration of separate bodies of knowledge, and through the application of the various subject areas to a specific problem, enables the neophyte researcher to develop and grow. Fortunately for me, there were a number of people who willingly nurtured and guided my thoughts and interest.

Foremost among those contributing to the final product are:

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Doctor Donald A. Taylor, Professor and Chairman of the Department of Marketing and Transportation, Michigan State University, assisted in developing the questionnaire, and as a member of the dissertation committee, provided helpful suggestions on research techniques.

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Miss Colleen A. Brady, Senior Research Associate, American Stock Exchange, Inc., Research Department, provided detailed data in a professional and friendly manner to the myriad questions asked of her.

And, finally, Janet, who provided loving and patient encouragement throughout the years which enabled me to pursue the bachelor's, master's and doctoral degrees.

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CHAPTER I

INTRODUCTION

Research Objectives

The purpose of this research is to learn more about the theory of the firm that relates to the decision to list or refrain from listing common stock on a national exchange. As Cyert and March pointed out in their book, A Behavioral Theory of the Firm, "...in order to understand contemporary economic decision making, we need to supplement the study of market factors with an examination of the internal operations of the firm--to study the effects of organizational structure and conventional practice on the development of goals, the formation of expectations, and the execution of choices."¹

A primary objective is to supplement the market factor studies of other investigators by researching the behavioral and attitudinal characteristics which influence the listing decision. By augmenting the level of available information, economic efficiency may be improved since the correct decision--to remain in the over-the-counter market or to join the "autonomous" market of a national exchange--may have

¹Richard M. Cyert and James G. March, A Behavioral Theory of the Firm (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1963), p. 1.

implications for stockholders in terms of marketability and liquidity and for the company in terms of its cost of capital.²

Nature of the Problem

Most decision making activity of the firm takes place under conditions of uncertainty and is predicated upon management beliefs and expectations and "...since the future can never be forecast with certainty, financial decisions must rest in part on margins of safety, flexibility, and protective strategies to deal with changes in the crucial variables."³

This study investigates the listing decision process in order: (1) to ascertain the crucial variables that are analyzed and evaluated, (2) to learn which variables are given the greatest emphasis in the choice of markets, (3) to determine those individuals or groups which tend to have the strongest influence on the listing decision, and (4) to develop a multiple discriminant function that classifies firms as either listers or nonlisters.

²The listing of a stock when there is insufficient demand in the "autonomous" exchange market may result in decreased marketability and information by the subsequent loss of support by the over-the-counter dealers. If the loss of support and decreased publicity reduces the price per share (from what it had been or would have been), then the company's cost of capital may be raised.

³J. Fred Weston. "Toward Theories of Financial Policy," Journal of Finance, Vol. X (March, 1955), p. 137.

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Background of the Problem

A company's common stock must be publicly held before it can be listed on an exchange. Going public usually requires the services of an investment banker to facilitate the initial public distribution of stock. After the original sale, one or more dealers become "market-makers" by maintaining inventories and by offering to buy or sell its common stock. Over time, the increases in a company's sales, income, and ownership base attract not only additional dealer interest but may also bring the company to the status where its stock becomes eligible for listing on an exchange. The companies which meet an exchange's eligibility requirements have the option of selecting where their stock is to be traded, that is, either listed on a national exchange or sold over-the-counter.

Once the company has the option of listing or of refraining from listing, it should (if it has not already done so) thoroughly investigate the national exchange for which it is eligible. However, a review of academic and business literature reveals that there is a dearth of information available to guide or assist executives in the listing decision. For example, there is little research regarding the reasons for a company's stock remaining in the over-the-counter market once it has met an exchange's listing requirements. Furthermore, as the next section shows, for those companies who chose to list their stock there is conflicting evidence regarding the value of listing when stock prices are considered.

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Prior Research

James E. Walter found that the most frequently given reason for not listing their stocks on the Pacific Coast Stock Exchange by 19 eligible, regional companies was the concern with loss of broker support.⁴ Whether or not the same level of concern regarding broker support exists for nationally known companies whose common stock is widely held has not been answered either by Professor Walter or other researchers. Furthermore, Professor Walter's survey of 19 firms appears to be the only research attempt made to determine why firms do not list.

There are, however, written statements in the financial press that tend to assume that there are different effects between the over-the-counter and exchange markets on the price of common stocks. Examples of these statements are:

"The price of over-the-counter stock is not swollen by the premium the public is ordinarily willing to pay for exchange-listed securities."⁵

"A company with stock listed on the New York Stock Exchange is not strictly comparable to a company whose stock is traded over-the-counter. Ordinarily we would expect the latter stock to sell at a somewhat higher yield and lower price-earnings ratio."⁶

⁴James E. Walter, The Role of Regional Security Exchanges (Berkeley, California: University of California Press, 1957), p. 86.

⁵The Commercial and Financial Chronicle, October 10, 1963, p. 1415.

⁶Robert W. Johnson, Financial Management (3rd ed.; Boston: Allyn and Bacon, Inc., 1966), p. 635.

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"...leading investment companies and the courts are convinced that listing creates an incremental capital value for most listed stocks."⁷

A number of different approaches have been attempted in order to test some of the beliefs regarding stock prices when common stocks are moved: (1) from the over-the-counter to the exchange markets; and (2) from the exchange markets to the over-the-counter market.

Three of these approaches are: (1) delisting, where the effects on prices are evaluated when a stock moves from a national exchange to the over-the-counter market; (2) the effects relating to the "anticipation of listing"; and (3) listing effect studies.

Delisting Effects

In 47 out of 53 issues, the last available listing price was higher than the earliest available over-the-counter price for those stocks delisted from the New York and American Stock Exchanges. On the average, the loss amounted to about 17% for delisted stocks compared with a gain of about 1% for the remaining listed stocks.⁸ However, as this study pointed out, the reasons for delisting often determine the extent to which a stock will be affected.

⁷ John L. O'Donnell, "Case Evidence on the Value of a New York Stock Exchange Listing," Business Topics, Vol. XVII (Summer, 1969), p. 21.

⁸ Barron's, March 4, 1963, p. 9.

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"Anticipation of Listing" Effects

A Barron's study indicated that "anticipation of listing is more favorable than the act itself."⁹ In that study 68 out of 94 issues outperformed their respective Dow-Jones average (i.e., the industrial or utility average, depending to which group the newly listed stock belonged) during the three months leading up to the date of listing; however, about half of the 68 stocks which gained in price suffered a sell-off the day after listing, and 43 stocks lost at least part of their gains with virtually all of these backsliders failing to perform as well as the general market during the 30 days immediately following listing.¹⁰

Listing Effect Studies

Professor Van Horne concluded in a recent article that "support cannot be marshalled for the hypothesis that market participants can 'profit' from buying a stock upon the announcement to list and selling it at the time of listing, nor for the idea that listing is a thing of value."¹¹

Van Horne's approach was to randomly select ten firms each year that listed on the New York Stock Exchange and ten firms on the American Stock Exchange from 1960 through 1967. His empirical tests involved the analysis of prices

⁹Barron's, January 29, 1962, p. 14.

¹⁰Ibid., p. 5.

¹¹James C. Van Horne, "New Listings and Their Price Behavior", The Journal of Finance, Vol. XXV (September, 1970), p. 794.

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of the listing stocks over five dates: four months prior to registration with the SEC; two months prior to registration; the registration date; the listing date when the stock was first traded on the exchange; and two months after listing. He constructed price indices for the listing firms and then subtracted the appropriate Standard and Poor's industry average price index in order to hold constant the effect of stock price movements in the market. Before adjustments for transactions cost, there was a significant difference in price appreciation (at the 5% level) for newly listed stocks for the period two months before registration to two months after listing. However, after adjustments for transactions cost, the difference, between price changes of newly listed stocks and industry average price changes for the same period, was no longer significant.

In another study undertaken to determine whether or not listing has an effect on share price, Professor Furst investigated 198 out of the 239 companies listed on the New York Stock Exchange from 1960 through 1965. He ran a regression analysis on price using actual or proxy variables for dividends, rate of growth, retention rates, book value, earnings stability, leverage, corporate size, and a listing variable on eight industry groups, taken both separately and collectively, and his conclusions were:

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"The results simply showed that, generally speaking, market price after listing was not significantly higher than it would have been if the stock had remained on the over-the-counter market. This does not eliminate the possibility that listing may benefit some companies while being detrimental to others. However, the research does indicate that, when other variables are considered, listing per se does not significantly affect the market prices of common stocks in general."¹²

These studies merely attempt to analyze whether or not listing has a dollar value. The research to date appears to be inconclusive. The "delisting studies" indicate that the exchange market enables a stock to sell at higher prices. The "anticipation of listing" studies imply that listing has a value but only in the short-run. One of the listing studies tends to support the "anticipation of listing" findings, and the other study, by Professor Furst, points out that listing, per se, does not significantly affect market prices in general.

It may be that variables, other than "expected dollar values," have a greater influence on the listing decision. In fact, it would seem that the importance of the "expected dollar value" decision variable would be reduced by the extent to which firms are aware of the uncertainty of favorable price per share changes.

Regardless of the lack of information and the conflicting conclusions, many companies make the decision to list

¹²Richard W. Furst, "Does Listing Increase the Market Price of Common Stocks," The Journal of Business, Vol. XXXXIII (April, 1970), p. 180.

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while others decide to continue marketing their stock in the over-the-counter market.

Other Literature

A comprehensive survey of the financial newspapers and journals and of the academic literature indicates that many authors hold similar beliefs regarding the effects of listing common stock. The writings of five authors, who succinctly summarize the available literature, have been consolidated into the following lists of advantages and disadvantages.¹³

The advantages of listing are enumerated as:

1. The broadening of the ownership base and the resultant increase in marketability of stock;
2. Listing facilitates the raising of additional capital, improves credit standing, and may lower the cost of capital;
3. Assists acquisition minded firms;
4. Makes possible margin trading;
5. Decreases market volatility (because of the specialist activity);
6. Listing has public relations and advertising value;
7. Listing augments the firm's prestige and reputation.

¹³ The advantages and disadvantages are summaries from the following sources: Adolph E. Grunewald and Erwin Esser Nemmers, Basic Managerial Finance (New York: Hole, Rinehart and Winston, Inc., 1970), p. 448; Robert W. Johnson, Financial Management (3rd ed., Boston: Allyn and Bacon, Inc., 1966), pp. 579-80; Raymond P. Kent, Corporate Financial Management (3rd. ed., Homewood, Illinois: Richard D. Irwin, Inc., 1969), pp. 559-63; Donald E. Vaughan, Survey of Investments (New York: Holt, Rinehart and Winston, Inc., 1967), pp. 154-5, 302; and J. Fred Weston and Eugene F. Brigham, Managerial Finance (3rd ed., New York: Holt, Rinehart and Winston, Inc., 1969), p. 556.

The disadvantages of listing are enumerated as:

1. The loss of management control;
2. The firm is under public scrutiny;
3. Reporting requirements are too onerous;
4. Listing imposes an additional expense burden;
5. Management may over-emphasize the short-run;
6. The loss of broker support;
7. Voluntary delisting is almost impossible.

The foregoing lists are representative of the beliefs held in the financial community at the time of their writing. However, within the past two years a number of changes have occurred that may have some bearing on these beliefs.

These changes are detailed in chapter two; however, it should be noted here that the "central market" concept and use of a "composite" tape still allows for the identification of the market in which the stock is traded, i.e., the over-the-counter market, the New York Stock Exchange or the American Stock Exchange.¹⁴ Furthermore, the changes do not require the abolition of the exchanges' trading floors even though computer, stock transfer, and various other exchange staff services are integrated.¹⁵

Although the foregoing beliefs (on the advantages and disadvantages of listing) are generally held throughout the financial community to be true, no references to supportive

¹⁴The Wall Street Journal, December 20, 1972., p. 18.

¹⁵The Wall Street Journal, December 1, 1972, p. 1.

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research are made by the authors. Finally, given that certain advantages or disadvantages may be true, such as, "listing imposes an additional expense burden," no one has determined by researching the opinions of eligible firms whether or not these assertions are relevant decision-making variables.

Statement of Problem

This study investigates the listing decision activity of firms which listed in 1969 or 1970 on the American or the New York stock exchanges and firms which have been eligible since 1969 for either of these exchanges but have refrained from listing.

The research attempts: 1) to ascertain the crucial variables that are analyzed and evaluated by firms; 2) to learn which variables are given the greatest emphasis in the choice of markets; 3) to determine those individuals or groups who tend to have the strongest influence on the listing decisions; and 4) to develop a multiple discriminant function that classifies firms as either listers or non-listers.

Hypothesis

Underlying this research is the concept that executive perceptions can be used to determine which companies are most likely to list their stock. These perceptions deal with the efficacy of the exchange market regarding changes in ownership base, the marketability of stock, loss of sales support;

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and with how executives value the opinions of other company officers, the board of directors, commercial and investment bankers, lawyers and institutional investors. The research hypothesis rests on the premise that these types of variables can be identified and utilized as a means of discriminating between listed and unlisted companies. Specifically, the hypothesis can be stated as:

Unlisted and listed companies can be identified and classified based on how executives value the opinions of professional finance and business personnel and on how executives perceive the efficacy of the exchange trading market.

Methodology¹⁶

This research is based on 311 responses to a mail questionnaire survey undertaken between August, 1971 and December, 1971.

Companies newly listed on the American or the New York Stock Exchanges in 1969 and 1970 and companies reported in the November, 1969, Standard and Poor's Index to Stock and Bond Reports, that met the numerical listing standards of either exchange by 1969, are included in this research.

The responses were coded, transferred to punch cards and tabulated. The survey findings were then subjected to the multivariate statistical tests of cluster analysis, factor analysis and multiple discriminant analysis in order

¹⁶A thorough treatment of the methodology is given in Chapter III, "Research Design."

to consider simultaneously the interactive effect among variables.

Potential Contributions of the Research

The principal contribution of this research is the development of a body of knowledge about the listing decision. The theory of the firm and economic decision making are supplemented by this study's examination of the internal operations of the firm.

The primary benefits of this study are: The updating, revising and augmenting of the level of knowledge about an infrequent but critical corporate decision; the more efficient allocation of resources by the exchange's stock list department; and the utilization of the results of this research by executives of smaller, growing companies to have a basis of comparison with more experienced companies having similar characteristics, and to reduce their search time for the most heavily weighted variables of the listing decision.

Limitations of the Study

This research consists of companies which were eligible for either the American or New York Stock Exchanges by 1969 and companies which were newly listed on these exchanges in 1969 and 1970. However, only companies in divisions A,B,C, D,F,H,I and J of the Standard Industrial Classification System

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were included.¹⁷ Division E (consisting of transportation, communication, electric, gas, and sanitary services) and Division G (consisting of finance, insurance, and real estate) were excluded from this research primarily due to their uniqueness which Congress recognized in the 1934 Securities and Exchange Act when it allowed federal agencies other than the Securities and Exchange Commission to supervise and regulate their reporting requirements and responsibilities under the Act.

The analysis is confined to eligible or newly listed companies. It does not attempt to answer why firms transfer from the American Exchange to the New York Exchange. Nor does it attempt to answer why companies list on the New York Exchange, having by-passed the opportunity to list on the American Exchange. The comparisons are made within exchange eligibility requirements. Firms eligible for the American are compared with firms listing on the American Exchange (and are referred to as the American company group) whereas firms eligible for the New York are compared with firms listing on the New York Exchange (and are referred to as the New York company group). Since the comparisons are made within, and not between, exchange eligibility requirements, the

¹⁷The Standard Industrial Classification System will be explained in the Methodology section; however, the contents of each included division are listed here: A: Agriculture, forestry, and fisheries; B: Mining; C: Contract Construction; D: Manufacturing; F: Wholesale and Retail Trade; H: Services; I: Government; and J: Nonclassifiable establishments.

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conclusions are applicable only within an exchange classification.

Organization

The remainder of this study is divided into four chapters. Chapter II presents recent changes that have taken place in the securities markets, followed by a comparison of the over-the-counter markets with the exchange markets. Chapter III contains a comprehensive presentation of the research design and methodology employed.

The presentation of findings are reported and discussed in Chapter IV. The results are summarized in tables, supported by details given in the appendix. Chapter V contains the conclusions of the study and implications for further research.

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CHAPTER II

THE OVER-THE-COUNTER AND THE EXCHANGE MARKETS

Background

In the United States the securities markets that firms evaluate are often divided into two broad categories: The over-the-counter markets and the organized securities exchange markets, which consist of the national and regional stock exchanges.¹

Companies listed on exchanges were brought under the regulation of the Securities Exchange Commission and under the registration requirements of the 1933 Securities Act by the passage of the Securities Exchange Act of 1934.

The passage of these two acts created substantial differences between the over-the-counter and the exchange markets. Listed companies were required to register their stock and were subjected to proxy solicitations, trading procedures, insider reports, and other periodic financial reporting requirements. The substantial differences frequently encouraged over-the-counter traded firms to remain

¹There is also the "third" or "off-the-board" market which consists of nonmember firms that do not charge regular commissions on listed stocks. Details on the third market may be found in: Frederick Amling, Investments, 2nd ed. (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1970), pp. 250-251; and Lee Silberman, "Critical Examination of SEC Proposals," Harvard Business Review, Vol. XXXXII (November, 1964).

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unlisted since they were not covered by the reporting requirements of the act. However, with the passage of the 1964 Securities Acts Amendments, the differences between the two markets were narrowed. This narrowing was brought about when companies with \$1,000,000 in assets or 750 stockholders (reduced to 500 by July 1, 1966) were required to register under Section 12 of the 1934 Securities Exchange Act. Unlisted companies that must register under Section 12 are now subjected to the same reporting requirements demanded of listed companies.²

Changes in the Securities Markets

Dramatic changes have taken place in the over-the-counter market since early 1971, and like the Securities Acts Amendments, have tended to make available for investors additional information on a more timely basis. For example, on February 8, 1971, the bid and ask prices of approximately 2400 over-the-counter traded stocks were electronically recorded and transmitted through the National Association of Securities Dealers Automated Quotations (NASDAQ) system.³ By December 31, 1971, nearly 3000 stocks were included in the system. Secondly, NASDAQ OTC Price Indices, patterned after the Dow Jones averages, were developed and on May 17, 1971,

²Companies not required to register are not subjected to the reporting requirements of the acts; however, they are somewhat regulated under the Blue Sky Laws of the state of incorporation.

³NASDAQ and the OTC (Washington, D. C.: National Association of Securities Dealers, 1972), p. 18.

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seven of these indices were introduced.⁴ And thirdly, the week beginning November 1, 1971 marked the first time that NASDAQ presented volume data.⁵ Prior to November, 1971, volume information was not available through NASDAQ nor any other source.

1971 was also the year for proposing major changes in the structure of the securities markets, changes that could affect the exchange markets as well as the unlisted markets. The most sweeping of these proposed changes is the idea of a "composite tape" to record transactions for a "central marketplace."

The Securities and Exchange Commission in a "Policy Statement on the Future Structure of the Securities Markets" indicated its definition of a central marketplace: "It is generally agreed that action must be taken to create a single market system for listed securities.... The term "central market system" refers to a system of communications by which the various elements of the marketplace, be they exchanges or over-the-counter markets, are tied together."⁶

NASDAQ is thought by many to have the facilities to form the nucleus of this communication system.⁷ However,

⁴The Commercial and Financial Chronicle, April 20, 1972, p. 1.

⁵NASDAQ and the OTC, p.18.

⁶Policy Statement by the SEC on the Future Structure of the Securities Markets quoted in Barron's, Feb. 28, 1972, p.3.

⁷Articles supporting NASDAQ's potential may be found in The Wall Street Journal, Feb. 5, 1971, p.22; Barron's, Mar. 8, 1971, p.3; and Barron's, Feb. 28, 1972, p.3.

that does not mean that this system will be selected nor that the listed and the unlisted markets will merge.

It may not be selected because both the American and the New York exchanges have proposed electronic systems.^{8,9} Secondly, as will be discussed later in this chapter, there are broad differences between the listed and unlisted markets in their methods of reporting prices and volume.

A national securities communication system does not require the markets to be merged nor does it mean that exchanges will lose their identity if included in a "central marketplace." As one source indicated, a central communication system "could be set up in 'tiers' so that such matters as listing standards for stocks and capital requirements for member firms could be more stringent, say, for Big Board 'tiers' and less so for those of the current regional exchanges."¹⁰

In his recent study of the New York Stock Exchange, Mr. William McChesney Martin, Jr. does not recommend the merger of the unlisted and listed markets. In fact, he believes that a great deal of autonomy should be left to each of the exchanges joining a national system.¹¹ Mr. Martin supports the application of equal regulations for all members of a national system

⁸The Wall Street Journal, March 29, 1972, p. 2.

⁹The Wall Street Journal, May 18, 1972, p. 3.

¹⁰The Wall Street Journal, April 30, 1971, p. 1.

¹¹The Wall Street Journal, October 15, 1971, p. 3.

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and recommends that all trades be shown on a composite tape.

The final structure of a central marketplace or of a composite tape is still uncertain though progress has been made on its conceptual development. The practical problems of implementing a central marketplace were obvious at the Spring 1972 meeting of the Securities Industry Association.¹² Agreement could not be reached on the following items:

1. Timing of introduction.
2. Common rules for members.
3. Capital requirements for marketmakers.
4. Negotiated rates.
5. Institutional membership.
6. Block trading.
7. Clearing operations.
8. Consolidated tape characteristics.

Even if a composite tape or a national communication system is operationally feasible, there are still differences of organization and methods of doing business that firms need to evaluate if they are to choose the market, exchange or "tier" that is best for their stock.

A Comparison of the Over-the-Counter and Exchange Markets

The chief differences between the over-the-counter markets and the listed or exchange markets lie in 1) Organization, 2) Methods of doing business, and 3) Membership standards and publicity.¹³

¹²The Commercial and Financial Chronicle, April 30, 1972, p. 2.

¹³Jules I. Bogen (editor), Financial Handbook (revised printing, New York: The Ronald Press, 1957), p. 67. Professor Bogen suggested organization and methods of doing business; however, I believe that current circumstances require a third category.

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Figure 2-1 summarizes a comparison of the characteristics of the two markets and the discussion which follows parallels the items shown.

Characteristic	Over-the-Counter Market, NASDAQ Stocks	Exchange Markets Listed Stocks
Organization		
Structure	Loosely Knit	Tightly Organized
Location	Numerous Dealer offices throughout country	Exchange Floor New York City
Methods of Doing Business		
Type of Sale	Negotiated	Auction
Transaction Costs	Mark-Up Basis	Commission Basis
Price Quotes	Representative Bid and Asked	Actual Prices
Market Makers	Two or More	One
Volume Reporting		
per transaction	no	yes
daily total	yes	yes
number of shares	duplicate count possible	actual
block trades reported	deletion possible	yes
Membership Standards and Publicity		
Criteria for Inclusion		
market standards	yes	yes
reporting require- ments	yes	yes
fees paid by company	no	yes
Publicity		
newspapers	most stocks	all stocks
electronic system	yes	yes
tape	no	no

Figure 2-1

A Comparison of the Characteristics of the Over-the-Counter and the Exchange Markets

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The Over-the-Counter Market

Organization

Structure

The over-the-counter markets consist of all the facilities devoted to effecting securities transactions which are not executed on exchanges.¹⁴ Little of the over-the-counter business is transacted by direct personal contact as this market consists of loosely-knit units.

Location

The thousands of brokers and dealers located throughout the United States are linked together by telephone, telegraph, and the NASDAQ system.

Prior to NASDAQ there was a marked degree of regionalism, primarily because most brokers and dealers operated in a local area in terms of both the securities they handled and the location of their customers.¹⁵ NASDAQ has reduced some of the emphasis on regional securities handling by enabling a broker or a dealer to quickly obtain and disseminate information about securities of companies located in almost any area of the United States.

Methods of Doing Business

Type of sale.--The over-the-counter market is principally a negotiated market with negotiations taking place between the

¹⁴Irwin Friend, et al. The Over-the-Counter Securities Markets (New York: McGraw-Hill Book Company, Inc., 1958), p. 4.

¹⁵Ibid., p. 10.

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customer and either a broker or a dealer.¹⁶ There may also be negotiations between brokers and dealers or between dealers and other dealers.

The dealer may act as a broker (agent) or as a dealer (principal); however, the customer has the option of specifying the legal role of the broker-dealer firm in a transaction. The firm is required by law to reveal its legal role in the transaction.¹⁷

The terms "broker" and "agent" are used interchangeably, that is, as a firm or a person who transacts orders with the risk remaining in the account of the principal. A dealer acts as a principal and assumes all risk.

A dealer can handle purchase orders from a customer in any of three ways:

¹⁶"The term 'broker' means any person engaged in the business of effecting transactions in securities for the account of others, but does not include a bank." "The term 'dealer' means any person engaged in the business of buying and selling securities for his own account, through a broker or otherwise, but does not include a bank...." U.S. Congress, House, Securities and Exchange Commission, Securities Exchange Act of 1934 as Amended to July 29, 1968, 73d Congress, 1968, p. 2.

¹⁷Irwin Friend, et al. The Over-the-Counter Securities Markets (New York: McGraw-Hill Book Company, Inc., 1968), p. 11.

1. If a dealer "makes a market" in a particular stock a customer wants to buy, he can sell him the stock out of his own inventory.¹⁸
2. When a dealer gets the order, if he doesn't make a market in that particular stock, he can act as the customer's agent and buy it for him from some other dealer who does make a market in that stock, or from someone who owns the security and wishes to sell it.
3. When the dealer gets the order, he can purchase the security for his own account from a dealer who makes a market in that security, or from someone who owns the security, and re-sell it to his customer.¹⁹

Transaction costs.--When a broker acts on a customer's behalf, he charges only a commission. When a dealer sells securities to his customers, he does not charge a commission. A dealer makes his money from the mark-up on his merchandise. When the mark-up exceeds what the commission would be, then a "profit" opportunity may exist for the dealer.

The dealer's mark-up is limited by two constraints: one, other dealer competition, and two, the National Association of Security Dealers (NASD) five percent mark-up

¹⁸"The phrase 'to make a market' means that the dealer creates and maintains a market in a security. A dealer is said to 'maintain' a market in a security when he is known to be willing at all times to buy or sell that security usually for his own account and risk, at the prices he quotes." Leo M. Loll and Julian G. Buckley, The Over-the-Counter Securities Markets (2nd ed.; Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1967), p. 146.

¹⁹Ibid., p. 156.

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policy.²⁰ Within these constraints it remains possible for a dealer's mark-up to exceed a broker's commission (that is not the case with listed stocks as only a commission may be charged to the public).

In both the over-the-counter and the listed markets, the majority of representatives of securities firms are in fact assuming a dual role in their dealing with the public, that of an advisor and that of a merchant.²¹ Because of the opportunities for increased revenues under the mark-up system, a dealer may tend to promote more interest in over-the-counter traded stock than listed stocks, other things being equal, when a customer seeks his advice.

Price quotes.--The NASDAQ system segments the over-the-counter market into two groups: Members of the system and non-members.²² Since all companies in this study are members and since national and New York newspaper publicity on price quotes emanate from this system, the NASDAQ types and methods

²⁰A five percent mark-up policy has been adopted by the National Association of Security Dealers as a guideline. The dealer is not necessarily entitled to always charge five percent, nor is he always limited to five percent or less. "The most important point the broker/dealer should keep in mind when marking up securities for resale to investors is that the mark-up must not be UNFAIR." Loll and Buckley, p. 151.

²¹Friend, et al., p. 28.

²²Quotes on non-member company stocks are not instantaneous but are available in the pre-NASDAQ fashion, i.e., through the Pink Sheets of the National Quotation Bureau or by telegraph or telephone contact with dealers. Communication of price quotes is the essential difference between members and non-members as "NASDAQ does not change the actual trading process." NASDAQ and the OTC, p. 22.

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of computing quotes is discussed here.

NASDAQ is a computerized communication system which operates on three levels.²³

Level one delivers current representative bid and asked prices by selecting a median quote from among the dealers making a market in a specific stock.

Level two serves the needs of two types of users: 1. Broker/dealers retailing OTC securities to the public, and 2. Large-scale professional order executors. The quotes of market makers in a specific stock are ranked in groups of five according to the best prevailing bids or offers.

Level three contains all level two information and in addition enables the dealer to enter or update quotations on the stocks in which he makes a market.

The price quotes viewed by the public are not actual prices, but are representative, median bid and asked quotes. Furthermore, only retail broker/dealers who subscribe to level two services see the current quotations of market makers. A retailer can quote the stock at the median price, purchase it at the asking price of the lowest market maker thereby creating a profit opportunity equal to the spread between the low and the median quotes.²⁴

Level three allows the market maker to change his quotes; however, in September 1971, the NASD instituted a

²³NASDAQ and the OTC, pp. 20-23.

²⁴The hypothetical mark-up would consist of the spread plus a commission. The actual mark-up in this case is limited not only by other dealer competition and the five percent policy, but also by another NASD rule which says that mark-ups need not be equal to five percent and should be related to the risk involved for the dealer.

rule requiring market makers to execute orders for at least 100 shares at their prevailing quotes. Prior to September, 1971, dealers sometimes refused to honor their quotes.²⁵

Market makers.--At least two dealers must make a market in each NASDAQ stock. Frequently, there are five and sometimes as many as 20 or 30 competing dealers making a market.

The more dealers making a market, the larger the capital resources.²⁶ The combined capital of a dozen or more competing dealers may greatly exceed the capital resources of an individual specialist trading in a similar listed security.²⁷

This type of dealer rivalry is purported to have "a beneficial effect on supply and demand because of the interaction between competing dealers which complements their merchandising activities and contact with investors."²⁸

Volume reporting.--Individual transactions are not reported either in the NASDAQ system or in the press. Daily

²⁵Barron's, Feb. 28, 1972, p. 3.

²⁶Each dealer must have net capital resources of the lower of either \$50,000 or \$5,000 for each security in which he is registered.

A specialist on the American Stock Exchange must have the higher of either \$100,000 or sufficient capital to buy 20 units (normally 2000 shares) of each security in which he makes a market. A specialist on the New York Exchange must have capital requirements which are the greater of a) \$500,000 or b) 25% of the position requirements, where the position requirements means that he must be able to buy 50 units (normally 5000 shares).

²⁷NASDAQ and the OTC, p. 12.

²⁸Ibid., p. 12.

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volume totals are available; however, on occasion these totals may be either overstated or understated. The totals may be overstated where volume includes "some duplication where NASDAQ market makers traded with each other."²⁹ And daily volume may be understated when the dealer is permitted to exclude block purchases from his reports; at the time the shares are sold, he includes the volume in his reports.³⁰

Membership Standards and Publicity

Criteria for inclusion.

Market standards.--To be included in the NASDAQ system each firm must meet minimal market standards dealing with shares outstanding, number of shareholders, number of market making dealers, bid prices, and asset value.

Table 2-1 lists the NASDAQ numerical criteria as well as the criteria for quotes and volume figures to appear in various newspapers.

²⁹The Wall Street Journal masthead that appears above the Over-the-Counter quotations contains this quote. The Wall Street Journal (Midwest Edition), June 8, 1972, p. 22.

³⁰Schedule D of the NASD By-Laws provides that "where a registered market maker purchases a block of a security and believes that disclosure of the purchase could disrupt the market in that security the registered market maker may, with the prior approval of the Corporation, exclude block purchases from its reports and include the volume in its reports only as the shares are sold." A block transaction is any single transaction whose value exceeds \$25,000. From the December 18, 1970, letter of the National Association of Securities Dealers, Inc., to all Members and Branch Offices.

TABLE 2-1

REQUIREMENTS FOR INCLUSION IN NASDAQ AND NEWSPAPERS^a

	NASDAQ	Daily National	New York Daily	National Weekly	New York Weekly	NASD Local List
Number of Stockholders:						
1. Nationally	500	2000 ^b	2000	1000 ^d	1000	- ^e
2. in New York area	-	-	1000 ^c	-	500 ^c	-
Shares Outstanding	100,000	-	-	-	-	-
Market Making Dealers	2	3	3	2	2	- ^e
Minimum Bid	\$3.00	\$5.00	\$5.00	\$2.00	\$2.00	\$1.00
Asset Value	1,000,000	-	-	-	-	-

^aEditors may exclude companies if they feel that regional interest is lacking or if they have limited space, even if the above standards are met.

^b1500 shareholders are sufficient if at least 300 shareholders in at least two of the four NASD geographic regions (Eastern, Central, Pacific Coast and Southwest).

^cThe New York area includes New York, New Jersey and Connecticut.

^dThere must also be at least 200 shareholders in at least two of the four NASD regions.

^eThe local List does not specify requirements.

Reporting requirements.--NASDAQ reported firms must submit a current annual report and have a current form 10K on file with the S.E.C. prior to being included. For continuing inclusion, companies must submit annual reports and agree to report immediately any drastic changes in the total shares outstanding. It is suggested but not mandatory that companies submit quarterly reports.

Fees paid by company.--Companies whose stock is reported in the NASDAQ system are not required to pay a listing or any type of fee.

Publicity.--The two vehicles of communicating relatively current information on volume and prices are: 1) the NASDAQ system, and 2) daily or weekly newspapers. To be included in newspaper lists of over-the-counter traded stocks, a security must first be part of the NASDAQ system.

Table 2-1 shows that except for the Local list, standards for newspaper publicity exceed standards for inclusion in NASDAQ. Therefore, the public is not always able to obtain daily newspaper information on all stocks included in the NASDAQ system.³¹

All price and volume information on NASDAQ stocks are processed electronically; however, there is no tape on which the individual transactions are displayed.

³¹Furthermore, if a stock falls below one of the minimum NASDAQ standards, it is automatically deleted by the computer for that day from the information sent to the wire services. Deletion from the wire service's reports is then a second reason why information is not available for newspaper publication.

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The Exchange Markets

Organization

Structure

The exchanges are highly organized markets which provide a central trading place where brokers and dealers regularly meet and transact business, set up rules and regulations governing the conduct and finance of their members, provide publicity for transactions in securities and, through restriction on the listing requirements and requests for filing current information, seek to establish standards for issues of securities which are traded.

The term "exchange" is defined as:

any organization, association, or group of persons, whether incorporated or unincorporated, which constitutes, maintains, or provides a market place or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities the functions commonly performed by a stock exchange as that term is generally understood, and includes the market place and the market facilities maintained by such exchange.³²

Each exchange consists of memberships or "seats" that are held by "members" of the exchange.³³ The different types

³²U.S. Congress, House, Securities and Exchange Commission, Securities Exchange Act of 1934 as Amended to July 29, 1968, 73d Congress, 1968, p. 2.

³³"The term 'member' when used with respect to an exchange means any person who is permitted either to effect transactions on the exchange without the services of another person acting as broker, or to make use of the facilities of an exchange for transaction thereon without payment of a commission or fee or with the payment of a commission or fee which is less than that charged the general public, and includes any firm transacting a business as broker or dealer of which a member is a partner, and any partner of any such firm." U.S. Congress, House, Securities and Exchange Commission, Securities Exchange Act of 1934 as Amended to July 29, 1968, p. 2.

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of members that may be associated with exchanges are: 1) commission brokers; 2) floor brokers; 3) specialists; 4) odd-lot dealers; and 5) registered traders.³⁴

Each brokerage firm must have one partner or stockholder who is an exchange member to transact business on the floor of an exchange. Frequently, the brokerage firms will own seats on more than one exchange in order to expedite service to customers and to earn commissions that may otherwise be lost.³⁵

Location

The American and the New York Stock Exchanges are located in New York City.³⁶ These exchanges are national in

³⁴Jerome B. Cohen and Edward D. Zinbarg, Investment Analysis and Portfolio Management (Homewood, Illinois: Richard D. Irwin, Inc., 1967), pp. 59-61.

³⁵Since there is no duplication of listing among the New York, the American, or the National Exchange, a brokerage firm would find it necessary to be a member of these exchanges (or be a member of a regional exchange that may also trade in these stocks) if it wishes to transact exchange sales on the companies listed.

³⁶There are 14 exchanges in the United States; 12 are registered and two exempted because of the small volume. The 12 registered exchanges are: American, Boston, Chicago Board of Trade, Cincinnati, Detroit, Midwest, National, New York, Pacific Coast, Philadelphia-Baltimore-Washington, Salt Lake, and Spokane. The exempted exchanges are: Honolulu and Richmond. Securities and Exchange Commission, 37th Annual Report. (Washington, D.C.: U.S. Government Printing Office, 1971, p. 220.

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their scope as demonstrated by the size and reputation of the firms listed and the volume of transactions accommodated.³⁷

The exchange markets are said to be centralized because all specialists making markets transact their business on the floor of the exchanges in New York City.

Methods of Doing Business

Type of sale.--The exchange markets are auction markets where prices are determined by a highly organized machinery for bringing bids and offers together at one place. It is proffered that "a securities exchange is one of the few examples of a true auction market. Here there are auctions on both sides of the market--competing buyers and sellers."³⁸

The Specialist is the individual making a market on the exchange floor whose two primary functions are: 1) to effectively execute orders entrusted to him by other exchange members, and 2) to maintain, insofar as reasonably practicable, fair and orderly markets in the stock(s) which he services.³⁹

In his efforts to maintain an orderly market, a specialist often makes both the best bid and best offer in a stock, as he is expected to risk his own capital by selling at a

³⁷The American and New York Exchanges account for 89.3% of the dollar volume and 90.3% of the share volume of all registered exchanges for the six-month period ending June 30, 1971. Securities and Exchange Commission, 37th Annual Report. (Washington, D.C.: U.S. Government Printing Office, 1971), p. 222.

³⁸Bogan, p. 66.

³⁹Now About the Specialist (New York: The New York Stock Exchange, 1965), p. 3.

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lower price or buying at a higher price than the public may be willing to pay or accept at that moment.⁴⁰ The specialist opens the market, operates as both a broker and a dealer, and transacts business only with other exchange members.⁴¹

An investor who wishes to purchase common stock will normally contact a brokerage firm and deal with the firm's employee, called a registered representative.⁴² The customer's order will usually be processed in the following sequence:

customer to registered to commission to specialist
 representative broker

Since the exchanges are auction markets, the commission broker, as the customer's agent, presents a bid to the specialist. The specialist attempts to match the highest bid with the lowest offer (sometimes, as previously noted, by buying or selling from his account). If there is a matching of bids and offers, a sale is transacted.

Transaction costs.--A minimum fee commission applies for all listed stocks sold on an exchange unless the dollar value

⁴⁰Cohen and Zinbarg, p. 60.

⁴¹Amling, p. 235.

⁴²A registered representative works directly with customers. He answers their inquiries, offers suggestions and initiates the processing of their orders. The commission broker transacts business on the floor of the exchange for the customers of the brokerage firm with whom the commission broker is associated. The commission broker acts only as an agent, receiving a commission for his services.

The floor broker (sometimes called a "\$2 broker") owns his own seat, acts in an agency capacity, and usually is not directly associated with a brokerage firm as his commissions are earned by transacting orders for other brokers on the exchange's floor.

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of the trade is in excess of \$500,000.⁴³

Table 2-2 lists the commission basis which applies to the various combinations of shares prices and dollar amounts as of June 12, 1972.

An investor, by applying the appropriate commission standards, can always determine what will be his transaction costs for stocks sold on an exchange.

Price quotes.--All prices shown on the tape and printed in the papers represent actual transactions. Each day's open, high, low and closing prices are shown, along with the high and low prices for the year.

⁴³ Transaction fees may be negotiated when the trade exceeds \$500,000. Rates are always negotiated when listed stocks are sold in the "third market."

TABLE 2-2

COMMISSION RATES OF THE AMERICAN AND NEW YORK STOCK EXCHANGES^a

Type and Size of Orders	Dollar Amounts	Minimum Commission ^c
100 Share and Odd Lots:	\$ 100 but under \$ 800	2.0% plus \$ 6.40
	\$ 800 but under \$ 2,500	1.3% plus \$ 12.00
	\$ 2,500 and above	0.9% plus \$ 22.00
Multiple Round Lot: ^b	\$ 100 up to \$ 2,500	1.3% plus \$ 12.00
	\$ 2,500 up to \$20,000	0.9% plus \$ 22.00
	\$20,000 up to \$30,000	0.6% plus \$ 82.00
	\$30,000 up to \$500,000	0.4% plus \$142.00

Source: Thompson and McKinnon Auchincloss, Inc., Stock Guide, June, 1972, p. 254.

^aCommission rates are identical for the American and New York Stock Exchanges.

^bIn addition to the fees shown, there is a \$6.00 and \$4.00 charge for the first to tenth round lots and the eleventh round lot and above, respectively.

^cThe minimum commission on a 100 share order or an odd lot order need not be more than \$65.00. The minimum commission per round lot within a multiple round lot order is not to exceed the single round lot commission computed in accordance with the rate for 100 share orders.

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Market makers.--Each listed stock is assigned one market maker called a specialist whose two functions are: 1) to effectively execute orders, and 2) to maintain a fair and orderly market in the stock he services.

The Specialist executes orders by matching the unfilled buy and sell orders which are recorded in his "book." In his efforts to maintain an orderly market, sometimes a Specialist makes both the best bid and best offer in a stock for his own account. To prevent the Specialist from profiting by his "inside" knowledge of the contents of his "book" severe restrictions and obligations are imposed upon him. Like the over-the-counter market makers, the Specialist operates as both a broker (executing orders for others) and a dealer (maintaining fair and orderly markets.) "Because of the possibilities of personal enrichment arising from the strategic advantage of a dual position, the S.E.C. has long had under consideration segregation of the functions of brokers and dealers."⁴⁴

Volume reporting.--Individual transactions are reported on the tape but are not individually shown in the newspaper. However, the daily totals include all round lot and block transactions taking place on the exchange. The volume figures are neither overstated or understated and represent actual trades.

⁴⁴Bogan, p. 73.

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Membership Standards and Publicity

Criteria for inclusion.

Market standards.--The American and the New York Stock Exchanges have minimum numerical standards that firms must meet to be eligible for listing.

Table 2-3 portrays the numerical standards for listing during the period covered by this research. A comparison of this table with Table 2-1 shows that standards for listing on the New York Exchange are significantly higher than for listing on the American Exchange. And that listing standards for the American are significantly higher than standards for inclusion of over-the-counter stocks in the NASDAQ system.

The vast differences in listing standards effectively segments the national exchanges into two markets: The New York Stock Exchange Market and the American Stock Exchange Market.

Reporting requirements.--Companies listed on either the American or New York Exchange must submit annual reports and quarterly reports on sales and earnings as well as six copies of all materials sent to shareholders.

TABLE 2-3
LISTING STANDARDS OF THE AMERICAN AND NEW YORK STOCK EXCHANGES

TABLE 2-3

LISTING STANDARDS OF THE AMERICAN AND NEW YORK STOCK EXCHANGES

	American Stock Exchange		New York Stock Exchange	
	November 1967 until April 1972	April 1972 to present	May 1968 until July 1971	July 1971 to present
Net Tangible Assets	\$3,000,000	\$4,000,000	\$14,000,000	\$16,000,000
Income: Net				
Pre-tax	\$ 300,000	\$ 400,000	-	-
2nd year back	\$ 500,000	\$ 750,000	\$ 2,500,000	\$ 2,500,000
3rd year back	\$ -	\$ -	\$ 2,000,000	\$ 2,000,000
	\$ -	\$ -	\$ 2,000,000	\$ 2,000,000
Market Value of Publicly Held Shares	\$2,000,000	\$3,000,000	\$14,000,000	\$16,000,000
Minimum Price Per Share	\$ 5	\$ 5	-	-
Number of:				
Shares Outstanding	-	-	1,000,000	-
Shares Publicly Held	300,000	400,000 ^a	800,000	1,000,000
Shareholders	900	1,200 ^b	2,000	-
Round Lot Shareholders	600	800	1,800	2,000

Source: Communication with the American and New York Stock Exchanges.

^a150,000 of the 400,000 publicly held shares must be held in 100 to 500 share lots.

^bThe 1200 shareholders must include 800 holders of rounds of which 500 round lot holders must hold 100 to 500 share lots.

Other circumstances which require submission of reports to the exchange staffs are:

1. Changes in the following:

- Character of the business
- Officers or directors
- Affairs and operation (that would significantly effect investment decisions)
- Property or stock held (in itself or in subsidiaries)
- Removal of collateral
- Deminution of stock in market

2. Required reports or actions:

- Upon demand by exchange
- Closing of transfer books (10 day notice)
- Solicitation of proxies

3. Other requirements:

- Transfer agent and registration office in New York City
- Nature of changes in transfer agent or registering
- Sufficient supply of stock certificates⁴⁵

Essentially, what is required, in addition to the routine reports, is the timely and adequate disclosure of corporate news. Unfounded rumors must be quickly dissipated, and any news or information that could affect materially the market for the companies' securities must be released promptly to the public.

Fees paid by company.--Each listed company must pay an initial listing fee and subsequently continuing annual fees must be remitted to the exchange.

⁴⁵This list, while not inclusive, is representative of the types of reports and circumstances necessitating reports to be submitted.

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Table 2-4 shows the initial and continuing annual fees for different amounts of common stock listed on the exchanges.

Table 2-4

LISTING FEES OF THE AMERICAN AND NEW YORK STOCK EXCHANGES

Fees	New York	American
Initial Listing Fees		
Fixed		
Minimum	\$15,000	\$ 250
Maximum	a	c
Variable Shares Listed:		
100,000	\$15,000	\$ 1,000
300,000	\$18,000	\$ 3,000
500,000	\$20,000	\$ 5,000
1,000,000	\$25,000	\$ 8,750
2,000,000	\$35,000	\$12,500
5,000,000	\$47,500	\$15,250
10,000,000	\$60,000	\$20,500
Continuing Annual Fee		
Fixed		
Minimum	\$ 5,000	\$ 500
Maximum	b	\$ 3,500

Source: Correspondence with the individual stock exchanges.

^aThe maximum fee depends upon the number of shares listed. A fixed fee of \$15,000 plus variable per share fees of: 1st two million shares, 1 cent each; 3rd and 4th million, 1/2 cent each, 5th through 300th million, 1/4 cent each; over 300 million shares, 1/8 cent each; are assessed at time of listing.

^bThe maximum continuing annual fee depends upon the number of shares listed. Up to 3 million shares it is 1/10 cent per share; above 3 million it is 1/20 cent per share.

^cThe maximum fee depends upon the number of shares listed. Above 2 million shares listed the fee is 1/8 cent per share.

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Publicity.--The three vehicles of communicating relatively current information are: 1) the Bunker-Ramo telequote system, 2) the exchange's electronic tape, and 3) daily or weekly newspapers.

The national newspapers, both daily and weekly, carry a complete list of all stocks on the American or New York Exchanges.⁴⁶

All price and volume information on listed stocks are processed electronically; through the Bunker-Ramo telequote system and on the tape, where each individual transaction can be seen.

⁴⁶ Stocks not traded are not deleted as with over-the-counter quotes but rather are shown under a column captioned "Stocks not traded."

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CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

This chapter is divided into four sections. The first outlines the objectives and development of the questionnaire. The second identifies the dependent, independent, and related variables which are studied. Section three explains the process for selecting companies for inclusion in this research; and, finally, the fourth section discusses the approaches and techniques applied in the data analysis.

Questionnaire Objective and Development

The questionnaire developed for the research, and shown in Appendix A, was designed to determine the extent to which companies may be classified as either listers or non-listers in accordance with the beliefs executives express when responding to certain variables.¹

Development of the Questionnaire

The questionnaire evolved from three primary sources. First, a review of the literature indicated that certain variables were relevant to the listing decision. Since no evidence was available to support or reject the consideration of these variables, they were included in the questionnaire. Second, discussions with representatives of the various stock

¹Copies of the questionnaires appear in Appendix A, pp.125-30.

exchanges provided other reasons why a company may choose to list its stock. And three, inquiries to corporate executives revealed additional variables thought to be relevant to the listing decision. After reviewing and reflecting upon the information obtained from these three sources, a pretest questionnaire was developed.

Pretesting of the Questionnaire

The pretest questionnaire was administered and discussed with businessmen in the Detroit, Michigan area to obtain their reaction to and interpretation of the questions asked. These executives indicated a willingness to answer each question. Approximately 25 minutes were required to answer completely the questionnaire. The questions which required verbal clarification were rewritten.

The second step in pretesting the questionnaire was to have it subjected to scrutiny from the faculty and doctoral candidates in the Department of Accounting and Financial Administration at Michigan State University. Their comments and suggestions were utilized in the final questionnaire.

The third step was to select randomly and to survey companies by mail to test the responses to the pretest questionnaire. These responses, along with the suggestions received in step two above, were incorporated into the final questionnaire. The revised contents and format were presented to the printer for styling and reduction in print in order to have an appealing package for surveying company presidents.

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Questionnaire Construction

The questions were written to facilitate responses by requiring the following types of answers:

- (✓) check marks
- estimates of activity (number of times)
- choice of scaled intervals
- circling of yes or no answers
- estimation of weights (scale given)
- handwritten or typed answers for the
- two open-end questions

The analytical and statistical techniques applicable to these types of answers will be discussed in the section covering the techniques of analysis.

Organization of Contents

The questionnaire consists of four pages and is separated into five parts. The first part requests information about: the respondent and his background, the responsibilities for investor information, the frequency of financial reports, contacts with financial analysts, and financial specialists on the board of directors. These questions were placed first in order to establish rapport with the respondent prior to his encounter with the detailed second part.

Part two requests the executive to indicate what he believes would be the effects on his company's operations and company's common stock if the stock were to be listed on the American, Midwest, and New York Stock Exchanges. Twenty-four statements for evaluation of each of these three exchanges were presented for rating according to the following scale:

- 3 extremely unfavorable
- 2 moderately unfavorable
- 1 slightly unfavorable
- 0
- +1 slightly favorable
- +2 moderately favorable
- +3 extremely favorable

The third part requests information about the executive's attitudes towards the various expenses associated with listing. Six questions were asked to determine whether or not listing expenses were an important portion of the listing decision process and to learn which, if any, of the expenses were considered to be significant decision factors.

Part four requests information on: knowledge of the company's eligibility for listing or its actual date of listing; how executives weigh the value of opinions given to them by various groups or individuals on the listing decision; discussion with over-the-counter market making dealers; contacts with exchange representatives; and listing intentions. The primary purpose of part four is to obtain information on whose opinion is considered most important in the firm's listing decision deliberations.

The fifth part contains two open-end questions which request the respondent to express his opinions about: 1) how a company should market its common stock, and 2) why his company listed or refrained from listing its common stock.

The Identification of Variables

Dependent Variable

The dependent variable is the type of market chosen for the trading of the company's common stock.

Since this research investigates the comparisons executives make between the American Stock Exchange and those over-the-counter companies eligible for it and the comparisons executives make between the New York Stock Exchange and those over-the-counter companies eligible for it, two separate analyses are made.

In the first analysis the dependent variable is the stock's trading market: either the American Stock Exchange or the Over-the-Counter market. In the second analysis the dependent variable is the stock's trading market: either the New York Stock Exchange or the Over-the-Counter market.

Independent Variables

The independent variables consist of 33 characteristics about which executives were asked to express their opinions if listing were to take place on the American, Midwest or New York Stock Exchange. Twenty-four of the 33 variables consist of statements that indicate possible effects on the company's stock and on the company's operations if the common stock were listed on an exchange as opposed to remaining traded in the Over-the-Counter market.² The other nine variables consist of the weights executives believe should be assigned to the opinions held by company officers and other professional individuals or groups who counsel executives on the trading market for their company's stock.³

²See Part II of the questionnaire in Appendix A, p. 126.

³See Part IV of the questionnaire, specifically that portion that requests the weighting of opinions, in Appendix A, p. 127.

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Related Variables

In addition to the dependent and independent variables, a number of ancillary variables were also studied. These variables are examined by relating the responses to the trading market chosen and include data on the company's financial activity and related programs, the number of contacts with financial analysts, financial specialists on the board of directors, and characteristics of the individual respondent.

Selection of Companies for Study

Included Industries

Firms incorporated and headquartered in the United States from the following Standard Industrial Classification Divisions are included in this research: Agriculture; Forestry and Fisheries; Mining; Contract Construction; Manufacturing; Wholesale and Retail Trade; Services; Government; and Non-classifiable Establishments.⁴ Firms in these industries which are required to register under the 1964 Securities and Exchange Acts Amendments submit their required reports directly to the Securities and Exchange Commission and therefore have relatively homogeneous reporting requirements.

⁴Each firm has been classified according to the standard industrial classification (SIC) code number. If a firm has more than one SIC number, the number that was selected represents the primary business in which the firm operates. The SIC classification system was developed under the sponsorship and general supervision of the Office of Statistical Standards of the Bureau of the Budget, Executive Office of the President. For further information see: U.S. Bureau of the Budget, Office of Statistical Standards, Standard Industrial Classification Manual (Washington, D.C.: U.S. Government Printing Office, 1967), pp. V-XII.

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Excluded Industries

The types of industries excluded are: Finance, Insurance and Real Estate; and Transportation, Communication, Electric, Gas and Sanitary Services.⁵ These industries are eliminated to maintain comparability, primarily in the amount of information required and the form in which it must be made available to the public. Firms in these industries which are required to register with the S.E.C. under the 1964 Securities and Exchange Act Amendments have their activities and reporting requirements supervised and regulated by federal agencies other than the Securities and Exchange Commission.⁶

⁵ Divisions E and G, respectively, in the Standard Industrial Classification System.

⁶ The 1934 Act excludes from registration requirements securities issued by investment companies, securities of savings and loan associations, securities of certain agricultural marketing cooperatives, and securities of certain non-profit organizations. Furthermore, the Securities Acts Amendments of 1964 state that the registration, periodic reporting, proxy solicitations, and insider reporting and trading provisions of the Exchange Act relating to all bank securities (other than securities issued by state banks which are neither members of the Federal Reserve System nor insured by the Federal Deposit Insurance Corporations) will be administered and enforced by federal agencies other than the Securities and Exchange Commission. (See: U.S. Congress, House, Securities & Exchange Commission, Securities Exchange Act of 1934 as Amended to July 20, 1964, 73d Congress, 1968, pp. 13-14.) Insurance companies are exempt from the registration requirements provided the company is regulated by its state of incorporation in certain specific respects.

The reasons for excluding firms in the transportation, communication, electric, and gas industries are fourfold: 1) the SEC allows that "the reports of any person whose methods of accounting are prescribed under the provisions or any law of the United States, or any rule or regulation thereunder, the rules and regulations of the Commission with respect to reports shall not be inconsistent with the requirements imposed by such law or rule or regulation in respect to the same

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Other Exclusions

All foreign companies, whether listed or over-the-counter and eligible for listing, are excluded from this study.

Companies which have two or more classes of common stock are excluded from this study due to the uniqueness of the different classes of common stock.⁷

Foreign companies and companies having two or more classes of common stock are removed to preserve the relative homogeneity of the included companies in terms of both reporting requirements and corporate characteristics.

Data Sources Utilized to Develop a Selection Base

The two primary sources employed for selecting companies are the publications of the stock exchanges and the Index to Stock and Bond Reports as prepared by the Standard and Poor's Corporation.

The companies that were newly listed on the American Stock Exchange in 1969 and 1970 were from records prepared

subject matter..."; 2) these types of industries are regulated and therefore oftentimes have particular approaches to both accounting rationale and to methods of reporting; 3) it is not feasible to include these industries because of the adjustments to their financial statements that may be required to make them comparable to other industries; and 4) these industries are not comparable in the sense that their rate of return is limited by a regulatory agency rather than in the marketplace.

⁷Many of these companies have a class of non-voting stock, have a class of stock that is almost completely privately held, and have different prices and dividends and pre-emptive rights for each class of common stock issued.

by the Exchange's Securities Division.⁸

The companies that were newly listed on the New York Stock Exchange in 1969 and 1970 were obtained from documents published by this exchange.⁹

Companies having over-the-counter traded common stocks were selected from the 1969 Index to Stock and Bond Reports as prepared by Standard and Poor's Corporation.¹⁰ This source was chosen because specific financial data must be available in order to determine whether or not a company's stock meets the minimum numerical listing requirements of the various exchanges. The required information (with the exception of round lot shareholders) relating to a company's stock ownership, financial statistics, and other historical information is made public in Standard and Poor's Over-the-Counter and Regional Exchange Stock reports.

While some bias may enter because of using the Standard and Poor's Index as the sample base, I believe that the selection of companies from this index is appropriate for the following reasons:

⁸Copies of the American Stock Exchange's internal records for 1969--"New Stock Listings" and 1970--"New Stock Issues" were made available upon request to the Securities Division.

⁹Annual Report 1970 (New York: The New York Stock Exchange, 1970), p. 18; and New York Stock Exchange 1970 Fact Book (New York: The New York Stock Exchange, 1970), pp. 34-35.

¹⁰Standard and Poor's Corporation, Over-the-Counter and Regional Exchange Stock Reports (Stock Reports: 3010-6000; Ephrata, Pa.: Standard and Poor's Corporation, 1969).

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1. Listing requirements themselves are biased toward those firms having a wide distribution of stock ownership and a sufficient size of operation to generate relatively broad investor interest.
2. The Standard and Poor's requirements for inclusion in their index was lower than the listing requirements of all but the smallest stock exchanges.¹¹
3. Approximately 62% of the 1111 companies whose bid and ask prices were reported in The Wall Street Journal on June 30, 1969 are included in Standard and Poor's 1969 Index.
4. Thirty-four of the thirty-five common stocks making up the Over-the-Counter Industrial Average are included in this research.
5. Approximately 66% of the 1045 companies whose bid and ask prices were available over the Bunker-Ramo Corporation's Telequote III as of May 1970 are included in Standard and Poor's 1969 Index.

¹¹ Prior to 1969 Standard and Poor's did not have internal specific requirements that firms must generally meet in order to be published in their OTC reports. Beginning in January 1969, the company adopted the following criteria for firms wishing to be added to their OTC reports:

1. At least seven dealers as listed in the National Quotations Bureau "Pink Sheets."
2. Daily quotations in The Wall Street Journal and/or the New York Times.
3. A satisfactory flow of corporate information, preferably including quarterly reports unless the company is in an industry where less frequent issuance of reports is standard practice.
4. At least 1,000 stockholders.
5. At least 750,000 shares outstanding with at least 400,000 shares in the hands of the public.
6. Preferably, a bid price of at least \$10.

These criteria are applicable only to new firms to be added and this explains why Standard and Poor's Over-the-Counter reports still contain many companies that do not meet their internal standards.

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Methods of Selecting Companies for Study

Listed Companies

All companies (except those in the excluded categories) which became listed for the first time on either the American or New York Stock Exchange in 1969 and 1970 became eligible for this research.

The total number of newly listed companies eligible for inclusion is:

TABLE 3-1

NUMBER OF LISTED COMPANIES INCLUDED IN STUDY

	American Stock Exchange	New York Stock Exchange	Totals
1969	122	61	183
1970	<u>92</u>	<u>45</u>	<u>137</u>
Totals	214	106	320

Unlisted Companies

The November, 1969 Over-the-Counter and Regional Exchange Stock Reports index contained information on 1200 companies, of which 568 were excluded for the reasons previously cited with the remaining 632 over-the-counter companies being analyzed for possible inclusion. However, 57 of these companies subsequently became listed and are included under the count of newly listed companies. Another 112 companies were removed due to mergers, bankruptcies, not being public in time, and other miscellaneous reasons. This left 463 over-the-counter



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companies for potential inclusion in this study.

To determine which of the 463 companies met the minimum numerical eligibility requirements of the American or New York Stock Exchanges, it became necessary to collect certain financial and historical data for each company.¹² After these data were collected, they were compared to the minimum numerical listing requirements of the exchanges shown in Table 2-3.¹³ The results of this comparison are shown in Table 3-2.

¹²The data collected and stored on computer cards includes:

1. A number for identifying each individual firm.
2. The firm's SIC (Standard Industrial Classification) number.
3. Whether the firm is subject to margin requirements.
4. High stock price.
5. Low stock price.
6. Net income.
7. Pre-tax income.
8. Net worth (tangible).
9. Number of shares outstanding.
10. Number of shares publicly held.
11. Number of shareholders.
12. Whether voting or non-voting.
13. Market value of publicly held shares.
14. State of corporate office location.
15. Years in business.
16. Code for local, regional, or national operations of firm.
17. Code for number of types of common stock issued by firm.
18. Miscellaneous category slots (for categories within categories).
19. Number of round lot shareholders.
20. Pre-tax income - one year back.
21. Pre-tax income - two years back.

¹³Supra, p. 39.

TABLE 3-2

OVER-THE-COUNTER FIRMS CONSIDERED AND
THE NUMBER INCLUDED IN STUDY

Category	Considered	Included
Eligible for the American Stock Exchange	222	222
Eligible for the New York Stock Exchange	56	56
Meeting Neither Exchange's Standards	<u>185</u>	<u>0</u>
Totals	463	278

The exchange for which a firm is considered eligible is the exchange having the highest numerical requirements that the company can meet.¹⁴ These eligibility categories are viewed as mutually exclusive for the purpose of this study.

¹⁴The determination of a firm's eligibility for inclusion in this study was done by applying the minimum numerical listing requirements of each exchange. The exchanges indicate that while they have minimum numerical standards that other criteria must be met, such as each share of common stock must be voting, and both exchanges require the issuance of quarterly reports.

For example, a firm meeting the numerical requirements of the New York Exchange may still not be eligible for listing if it refuses to release quarterly reports. Yet to exclude the firm from this study may not be feasible for two reasons: 1) the firm's management may not wish to issue quarterly reports in order to respond with the statement "our stock is not eligible for listing" to stockholders who press for an exchange listing; in short, to apply criteria other than numerical for inclusion in this study may be "begging the question"; secondly, it is not feasible to attempt to apply those specific details and internal policies regarding listing standards that are known only within the various exchanges.

For example, if a company meets all the numerical standards of the New York Stock Exchange, it is placed in the New York eligibility category even though the company is also eligible for the American Stock Exchange.¹⁵

Time Period Covered by Study

Companies eligible for listing by June 30, 1969 or which became originally listed on either the American or New York Stock Exchanges in 1969 and 1970 are included in this study. As a matter of reality, it was assumed that newly listed companies met the numerical standards of the exchange on which they listed. To determine whether or not an over-the-counter company was eligible for listing, the necessary financial data was collected for the fiscal years ending between July 1, 1968 and June 30, 1969. This period was selected in order to have reasonable current information while simultaneously leaving sufficient time for some of the firms to list their stock before the survey began in July, 1971.

Geographic Location of Companies

The companies are located in 43 different states and the District of Columbia. The company office address was the criterion employed to determine the geographic location. There are no companies in this study having headquarters in Arkansas,

¹⁵The firm would be placed in the New York category since it could have listed on the American Stock Exchange (with its much lower numerical requirements) but had chosen to pass into a higher eligibility category.

Maine, Mississippi, New Mexico, South Dakota, Vermont, and Wyoming.

Questionnaire Recipients

The introductory letter which accompanied all questionnaires was written to the company president or if this position was temporarily vacant, to the chairman of the board. These positions were chosen because the nature of listing decision implies that the judgment of the highest corporate officers is likely to prevail.

Analytical Techniques and Programs

Administration

Each company surveyed was assigned a 6-digit number for purposes of control. A master list of company names and numbers was utilized to record the date the responses were received. A duplicate was made of each response and filed with the return envelope to avoid the repercussions from a loss of an original questionnaire.

An original request plus two follow-up letters were written to maximize responses.¹⁶ The first follow-up letter was sent two weeks after the original request was mailed. In order to approximate the possible differences between respondents and non-respondents, the second follow-up letter was mailed five weeks after the first follow-up letter. There

¹⁶Approximately 55.5 percent of the surveyed companies replied.

were no significant differences between the responses from the three mailings. No further action was taken with the actual non-respondents; however, the four different types of letters used in the second follow-up mailing shed considerable light on why firms did not respond.

Data Preparation

The responses from each questionnaire, with the exception of the open-end questions, were coded and placed onto two extra sets of cards which were made to avoid problems if the original deck were lost. Missing observations were handled in two ways. One method was to report "no answer given." The second method was to assign a number that was developed statistically. In the case of the questions covering the expectations of an exchange listing the following formula was employed:

$(N_i \cdot X_i + N_j \cdot X_j) / (N_i + N_j)$, where N_i equals the number of respondents in category i who answered the specific question and N_j equals the number of questions within the exchange listing battery answered by the individual respondent and where X_i and X_j are the means of the category and of the individual's responses to the exchange listing battery, respectively. In the case of questions on the valuing of professional opinions, a missing observation was replaced by the mean response (found within the relevant category) for the specific opinion.

Computer Programs

The following programs were utilized to organize the data, to develop the criteria for appropriateness of certain programs, to analyze the data, and finally to verify the results by classifying respondents with a separate program.

ACT Computer Program¹⁷

The program was applied first in order to obtain a broad perspective of the responses and to develop a profile of the individual companies and groups. The following types of information were available for analysis:

1. Frequency counts.
2. Table percentages between and within groups.
3. Percentages of totals in each cell.
4. Theoretical frequencies.
5. Chi-square with degrees of freedom and contingency coefficients.

The findings were considered to be significant when the computed chi-square values were larger than the value given in the Chi-square distribution table at the five percent confidence level for the appropriate number of degrees of freedom. This type of analysis was insufficient to test and analyze all of the data and therefore the following programs were run.

Split-Plot Design

The split-plot program was utilized to determine in advance the validity and the practicality of applying multiple discriminant analysis.

¹⁷Michigan State University, Computer Institute for Social Science Research, Analysis of Contingency Tables, Technical Report Number 14, January 12, 1968.

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A split-plot design with repeated measures or matched subjects represents an extension of the randomized block design for experiments having two or more treatments. The blocks of subjects are composed in such a way that variations among subjects within each block is less than the variation among blocks.¹⁸

The program provided two sets of information critical for this research. The first set tested for homogeneity of variance between firms within blocks. This test was necessary to determine if it were appropriate to utilize multiple discriminant analysis. The F-max criterion statistic table consulted showed that there is homogeneity of variance between firms within blocks and that the discriminant analysis assumption of homogeneity was met. Furthermore, the within-group covariation and dispersion are relatively equal across groups; a necessary condition for pooling of variance requirement of discriminant analysis.

Multiple Discriminant Analysis¹⁹

The reason for utilizing multiple discriminant analysis in this study is to be able to predict group membership, that

¹⁸ Roger E. Kirk, Experimental Design: Procedures for the Behavioral Sciences. (Belmont, California: Wadsworth Publishing Company, Inc., 1968), p. 245.

¹⁹ This program and the following two programs on factor analysis and cluster analysis were run from the data decks available through Data Sciences Associates, P. O. Box 71, Austin, Texas 78767. The Data Science decks were adapted from: Donald J. Veldman, Fortran Programming for the Behavioral Sciences. (New York: Holt, Rinehart and Winston, Inc., 1970).

is, whether companies are over-the-counter oriented or whether they are exchange oriented.

The multiple discriminant analysis program is designed to evaluate similarities and differences among "n" groups of respondents and to reveal identifying characteristics of each group.²⁰

The computer program develops discriminant functions from the input data (in this study, from the questionnaire responses). These discriminant functions are solutions for the linear combinations of predictor variables and enable the researcher to represent each of the groups by maximizing the among-groups sum of squares to the within groups sum of squares.²¹ The maximization of these sum of squares ratios minimizes the overlap in the distribution of the "M" measurements of the various groups.

The number of discriminant functions necessary to maximize the ratio, i.e., minimize the overlap (and thereby correctly assign a company to its respective group) is one less than the number of groups studied. The discriminant functions which are developed reduce the "m" measurements for each group into group centroids. These centroids represent a

²⁰A detailed presentation of multiple discriminant analysis appears in Chapter IX in C.R. Rao, Advanced Statistical Methods in Biometric Research (New York: John Wiley & Sons, Inc., 1962).

²¹Paul E. Green and Donald S. Tull, Research for Marketing Decisions, 2nd ed. (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1970), p. 368.

center of gravity or statistically, a mean of the "m" measurements for the groups under study. Since this research involves the problem of assigning a company to one of two mutually exclusive groups based on "m" measurements of the company, only one discriminant function is developed.

Cluster Analysis

The purpose of applying cluster analysis is to determine if there are "natural" groupings of variables by which a market is judged by corporate executives.

The objective of cluster analysis is to separate objects into groups so that each object is more like other objects in its group than like objects outside the group.²² Since cluster analysis is primarily concerned with description rather than inference, objects rather than variables, and with relationships among the whole set of data rather than criterion-predictor relationships, clustering can be viewed as "preclassificatory."²³

The cluster program utilizes a generalized distance analysis to successively cluster the variables (responses) and showed all stages of reduction from N one-company groups to one N-company group. However, since cluster analysis is concerned with the dual problem of reducing the number of variables, while attempting to maintain most of the information

²²Ibid., p. 433.

²³Ibid., p. 434.

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in the original matrix, the problem is one of finding a "natural" clustering among the variables. The final number of "natural" clusters is judgemental and depends upon a reasonable delineation of each cluster's relevance to the problem under study.

Factor Analysis

Factor analysis was applied to attain a parsimonious account of the executive's responses to variables that impinge on the listing decision. Although this technique possesses a number of potential drawbacks that tend to discourage its use as a device for making statistical inferences, it can be valuable as a data structuring tool.²⁴

In factor analysis the data is not partitioned into criterion and predictor subsets as interest is centered on relationships involving the whole set of variables.

Green and Tull describe the principal uses of factor analysis in the following way:

"The analyst is interested in establishing the 'strength' of the overall relationships among variables in the sense that he would like to account for the variation in terms of a smaller set of linear combinations of the original variables. Often his interest will stress description of the data rather than statistical inference."²⁵

Principal component analysis, one of the many techniques of factor analysis, was the method utilized. This approach

²⁴Harry H. Harmon, Modern Factor Analysis. (Chicago: University of Chicago Press, 1960), pp. 1-10.

²⁵Paul E. Green and Donald S. Tull, p. 403.

maximizes the sum of variances of squared factor loadings in the columns of the variables-by-factors loading matrix. A varimax rotation develops new axes which explain (in total) just as much of the common variance as explained by the unrotated loading matrix. And if successful, the varimax rotation tends to produce some high loadings and some near zero loadings which facilitate the identification of the prominent variables in each factor.

The survey questionnaires were factor analyzed using principal components analysis subjected to varimax rotation. The factors were then defined on the basis of the highest variable loadings for each factor.

Classification Program²⁷

This program enables a researcher to assign an individual or company, on the basis of their characteristics, to one of two or more groups. Three types of computations and output are available: 1. Probability of group membership; 2. multiple discriminant analysis scores; and 3. minimum chi-square values for each company.²⁸

The chi-square statistic serves as a measure of dissimilarity, that is, a company is said to be more deviant from the

²⁶Ibid., p. 419.

²⁷This program was developed by Doctor George E. Manners, Assistant Professor, Management Department, University of Notre Dame, Notre Dame, Indiana.

²⁸Since the discriminant scores are available through the discriminant analysis program and because the probability of group membership is directly related to the number of separate groups, only the minimum chi-square output from this program is utilized and discussed here.

"average member" of a group, the larger its chi-square value. "Conversely, an individual with a small chi-square value with reference to a group is 'closer' to the average member of that group, and may hence be said to resemble that group."²⁹

The chi-squares values are computed from the individual company's deviations from each of the groups against which the company is compared. The lowest chi-square value is selected and the company is classified as a member of that group, i.e., as being most like a listed or unlisted company.

The minimum chi-square test was utilized to verify the results of the multiple discriminant analysis approach and secondly, to avoid merely using the "mid-point" cut-off criterion normally applied after discriminant scores have been computed for two groups.

Validation Procedures

Classification of Companies by Questionnaire Responses

The companies assigned correctly, on the basis of their questionnaire responses, to their actual group membership indicates the predictive reliability of the research undertaken. To determine the statistical significance of the proportion correctly assigned, the t-test is employed. To determine which of the individual questions significantly contribute to the correct classification of companies, an F-test

²⁹Maurice M. Tatsuoka, Multivariate Analysis: Techniques for Educational and Psychological Research. (New York: John Wiley & Sons, Inc., 1971), p. 218.

of the differences between group means for each of the questions is computed. Since this is a test of separate characteristics and not a multivariate test, a significant difference between means indicates those questions that are able to discriminate between groups.

To verify and validate the ability of the questionnaire to correctly classify a company to its actual group membership, three distinct sets of companies were chosen: 1. Original-group companies, 2. subsequently listed companies: original-group, and 3. a special sample of companies newly listed on the American Stock Exchange in 1971 and the first three months of 1972.

Original-Group Companies

These over-the-counter and exchange listed companies were used to develop the multiple discriminant coefficients. The discriminant function was subsequently applied to this group of companies (from which it was developed) and the discriminant score for each company was computed. The score was then compared to the cut-off criterion and the company was assigned to either the listed or unlisted group. However, when the discriminant scores for one sample are derived from the discriminant coefficients developed from that sample, a large overstatement of companies correctly classified may result.³⁰

³⁰Ronald E. Frank, William F. Massy, and Donald G. Morrison, "Bias in Multiple Discriminant Analysis," Journal of Marketing Research, Vol. 2 (August, 1965), pp. 250-258.

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Two steps were taken to alleviate this problem: first, the minimum chi-square method was utilized to verify the discriminant results; and second, two separate groups, whose responses were not used to develop the discriminant coefficients, were classified. These two groups are discussed next.

Subsequently Listed Companies:
Original-Group

The original-group companies consisted of new listees in 1969 and 1970 on both the American and the New York Exchange and of over-the-counter companies which became eligible for listing on either of these exchanges by June, 1969.

Certain of these over-the-counter companies became listed in 1969, 1970 and 1971. Those which became listed in 1969 and 1970 were included with the newly listed companies of those years. The companies which became listed in 1971 were withheld from the original-group when the discriminant coefficients were developed. Subsequently, the discriminant function, and the cut-off criterion, were applied to this group of companies and their proportion of correct assignments was compared to the original-group correct assignment proportion.

Special Sample: Recent
American Exchange Listees

All companies, in the industries relevant to this study, which became listed on the American Exchange in 1971 and the first-three months of 1972 were surveyed.

The responses from this sample group were classified using the discriminant function and criterion developed by the

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original-group. This group was classified also by the minimum chi-square method. The assignment results were compared to the original-group assignment results. T-tests for the percent of companies correctly assigned were applied to test the significance of the findings.

CHAPTER IV

PRESENTATION AND ANALYSIS OF FINDINGS

Introduction

This chapter is divided into two sections. The first highlights the responses to all questions by grouping the answers under related topics. The details supporting the verbal summaries are given in Appendix B, Tables b-1 through b-70. Section two contains the statistical analysis of two batteries of questions: The listing battery, which deals with managerial expectations regarding the effects of listing, and the opinion battery, which concerns the value management assigns to the opinions of business and financial specialists. The responses to these batteries are subjected to multiple discriminant analysis, chi-square analysis, factor analysis, and cluster analysis.

Presentation of Findings

Responses

Usable questionnaires were received from 259 companies which included 43 percent of the total questionnaires mailed. The geographic distribution of returns had a .87 coefficient of correlation with the distribution of brokerage firms throughout the country and included 40 states and the

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District of Columbia. Companies from all Standard Industrial Classification Code Divisions studied returned questionnaires with two divisions. Manufacturing and Wholesale and Retail Trade accounting for 61 percent and 16 percent, respectively. These proportions parallel, in general, the proportions of stocks already listed. (Details on the responses received, geographic distribution of responding companies, and the various classification divisions can be found in Appendix B, Tables b-1 through b-6.)

Respondents' Personal Data

Ninety-three percent of the questionnaires were answered by the company's chairman of the board, president, vice president or treasurer. The 46-55 year old age bracket represented approximately 44 percent of the responses, and about 65 percent of the respondents were 46 years or older.

About 17 percent of the respondents had less than four years of college. Thirty-one percent had only a bachelor's degree, while the remaining 52 percent had acquired course work beyond the bachelor's degree.

An investment course or seminar was taken since 1964 by approximately 19 percent of the respondents. (Respondent personal data can be found in Tables b-7 through b-14.)

Corporate Characteristics

Financial and Historical Data

All companies substantially exceeded the numerical listing standards of the exchange group to which they belong.

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Tables 4-1 and 4-2 summarize the financial characteristics of the responding companies. Additional details may be found in Tables b-15 and b-16.

TABLE 4-1

FINANCIAL AND CORPORATE DATA: AMERICAN COMPANY GROUP
(Arithmetic Means in Thousands)

	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies
Net Tangible Assets	\$16,028	\$9,875
Net Income	\$ 1,934	\$1,644
Number of Shares Outstanding	1,359	1,935
Number of Shares Publicly Held	843	938
Number of Shareholders	2.4	1.9

TABLE 4-2

FINANCIAL AND CORPORATE DATA: NEW YORK COMPANY GROUP
(Arithmetic Means in Thousands)

	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies
Net Tangible Assets	\$52,434	\$37,399
Net Income	\$ 7,038	\$ 7,265
Number of Shares Outstanding	2,766	4,298
Number of Shares Publicly Held	1,823	2,999
Number of Shareholders	3.9	4.8

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Financial Programs and Relations

The final approval for the release of investor information is made by the chairman of the board or the company president in 64 percent of the responding companies. Vice-presidents or treasurers account for another 24 percent of those responsible for the release of investor information. Investor information appears to be the concern of top management and is not delegated to the lower echelons.

Investor relations programs are maintained by 50 percent of the companies. Eighty-one percent of the responding companies indicated that they had an individual responsible for investor relations even though they may not have an investor relations program. Stock option plans for corporate executives were offered by 83 percent of the companies; however, only 41 percent of the companies offered non-executives an employee stock purchase plan.

Financial specialists on the board of directors averaged approximately 1.4 per company. Unlisted firms averaged 1.1 per company, while listed firms averaged 1.6 per company.

Market making dealer data were requested from unlisted companies. A range from two to 30 and a mean of 7.9 dealers per company was noted.

Institutional holder information on a before and after listing basis was requested from listed companies. American listed companies experienced a 452 percent increase and the New York listed companies experienced a 402 percent increase in the number of institutional holders within approximately

two years after listing. (Details on corporate characteristics may be found in Tables b-17 through b-26.)

Financial Relations Activity

Financial Reporting

Balance sheet information is sent annually by 73 percent of the companies and quarterly by 24 percent of the companies to stockholders. Income statement information is sent quarterly by 93 percent of the companies to stockholders. The financial press and wire services receive balance sheet information on a quarterly basis from 26 percent of the companies, and annually by another 58 percent of the companies. Income statement information is sent quarterly to the financial press by 93 percent of the companies, and annually by another 3 percent of the companies.

Proxies are solicited annually by 97 percent of the companies.

"Other information" is sent quarterly by 33 percent of the companies, semi-annually by 4 percent, annually by 7 percent, at other times by 33 percent, and never by 9 percent of the responding companies. Fourteen percent of the companies did not answer this question. (Details on financial reporting may be found in Tables b-27 and b-28.)

Contacts with Financial Analysts

Unlisted companies initiate fewer personal and telephone contacts with financial analysts than listed companies; however, unlisted companies initiate more written contacts

with analysts than do listed companies.

Analysts tend to initiate contact more frequently with listed companies than with unlisted companies, the exceptions being personal and written contacts made to unlisted New York eligible companies. (Details on contacts with financial analysts may be found in Tables b-29 through b-40.)

Interest in an Exchange Listing

Internal Company Discussions

This question was asked of unlisted companies. Eighty-three percent of the American unlisted companies and 77 percent of the New York unlisted companies answered that they had discussed listing. Roughly eight percent indicated that listing had not been internally discussed.

Approximately 79 percent of the American group companies and 85 percent of the New York group companies indicated no interest in a "voluntary" delisting option. Approximately 12 percent of the American group companies and 10 percent of the New York group companies indicated that they would be interested in the option of being able to delist voluntarily after a trial period on an exchange. (Tables b-41 through b-44 detail company internal discussions and interest in a voluntary delisting option.)

Discussion with Market Making Over-the-Counter Dealers

Discussions regarding listing were made with dealers by approximately 54 percent of the companies. The dealer's attitude toward listing of the company's stock was reported

as negative by 49 percent of the companies which answered this question. Dealer attitudes were seen as neutral by another 20 percent of the reporting companies, and as positive by the remaining 31 percent of the respondents. Executives attribute the dealer attitudes to the gains or losses in commission perceived by the dealers and to the dealer's assessment of the over-the-counter and the listed markets. (Dealer discussions and attitude details are in Tables b-45 through b-48.)

Communication with Exchanges

Unlisted companies were asked if they communicated with exchanges. Fifty-six percent of the American unlisted group and 62 percent of the New York unlisted group indicated a positive answer to this question.

All listed and unlisted companies then were asked who initiated the contact between their firms and the exchanges and what type of contact was made. A smaller percent of unlisted companies initiated contact than did listed companies. The largest percent of contact, initiated by either exchange on a personal, telephone or written basis, was 35 percent. It appears that exchanges are contacting only a small portion of their total market of potential listers. (Details on communications with exchanges are given in Tables b-49 through b-52.)

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Listing Intentions

Major Exchanges Intentions

Unlisted companies were asked if they intend to list their stock. In the American unlisted group 42 percent said they will be listing their stock, 37 percent are undecided, 4 percent answered no, and the remaining 17 percent did not answer or checked off no comment. In the New York unlisted group, 38 percent indicated they would eventually list their stock, 35 percent are undecided, 12 percent said they do not intend to list, and the remaining 15 percent did not answer or checked off the no comment box.

Listed companies were offered the opportunity to indicate if they had any further listing intentions on a national exchange. The answer to this question was relevant to the American listed companies which may have the option to move to the New York exchange. Thirty-seven percent of the American exchange listed respondents indicated that they would later move to the New York exchange. Three percent do not intend to move, 21 percent checked off the no comment box, and 38 percent elected not to answer this question.

"Dual" Listing Considerations

"Dual" listing on a regional exchange is more favorably viewed by listed companies than by unlisted companies. The two regional exchanges having the strongest drawing power are the Midwest Exchange and the Pacific Coast Exchange. The majority of companies, 55 percent, indicated that they would not consider a "dual" listing, while another three percent

were undecided. (The listing intention details are shown in Tables b-53 through b-58.)

Listing Request Activity

Only six percent of the unlisted companies indicated they had requested listing within the past three years.

Listed companies were asked to indicate the exchanges at which they had requested listing within three years prior to their listing. Thirty-six percent of the American listed companies indicated they had requested listing on the New York exchange. Thirty-two percent of the New York listed companies indicated they requested listing on the New York exchange within the past three years. (Listing request details are available in Tables b-59 and b-60.)

Miscellaneous Questions

When asked whether or not they would be issuing additional stock, 19 percent of the companies said yes, 33 percent replied no, 20 percent had no comment, 27 percent were undecided, and 2 percent did not answer the question.

An option of being quoted or remaining anonymous was offered to each company. Six percent wished to be quoted, 11 percent did not answer this question; however, 83 percent wished to remain anonymous. Their desire for anonymity is respected, especially in view of their responses to three batteries of questions which follow. (Details on the miscellaneous questions may be found in Tables b-61 through b-64.)

Expenses Associated with Listing

Listing expenses were not seen as a significant consideration by most companies. Only six percent of the unlisted American company respondents and eight percent of the unlisted New York company respondents said that listing expenses precluded listing. However, 17 percent and 8 percent of the unlisted American and listed New York company respondents, respectively, indicated that listing expenses are an important portion of the listing decision. (Details on the five listing expense questions are presented in Tables b-65 and b-66.)

Executive Expectations Regarding an Exchange Listing

Listed and unlisted company executives were requested to rate the exchanges, compared to the over-the-counter market, on each of 24 items.¹ The arithmetic mean of each item for the unlisted and listed company groups is presented in Table 4-3 for the American company group and in Table 4-4 for the New York company group.²

¹Two questions were deleted because they imply "direction" as well as "intensity"; however, these two questions are included in Tables b-67 and b-68. This section and the statistical analysis section utilize 22 items.

²Each questionnaire contained instructions on a seven-point rating scale which ranged from -3 to +3. Instructions which accompanied the scale stated that -3 means extremely unfavorable, -2 moderately unfavorable, -1 slightly unfavorable, 0 means no effect when listed, +1 slightly favorable, +2 moderately favorable, and +3 extremely favorable. To facilitate computational procedures, the executives' responses were coded and processed according to the following transformations: -3 = 1; -2 = 2; -1 = 3; 0 = 4; +1 = 5; +2 = 6;

TABLE 4-3

EXECUTIVE LISTING EXPECTATIONS: AMERICAN COMPANY GROUP

How Listing is Expected to Affect:	Arithmetic Meansa		Probability of Identical Group Means
	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies	
Ownership Base (number of shareholders)	4.66	5.60	.000
Marketability of Stock (saleability)	4.99	5.99	.000
Loss of Sales Support by Over-the-Counter Market Making Dealers	2.75	3.23	.013
Sales of Additional Stock	4.97	5.25	.116
Transactions (volume of sales)	4.82	5.38	.002
Company's Credit Rating	4.25	4.65	.004
Access to Money and Capital Markets	4.62	5.17	.000
Price Volatility of Stock (fluctuations)	4.21	4.53	.116
Offers an "Advertising Value"	4.55	5.00	.002
Analysis of Stock and Company by Potential Investors	4.90	5.51	.000
Prestige for Your Company	4.82	5.70	.000

TABLE 4-3 (cont'd.)

How Listing is Expected to Affect:	Arithmetic Means ^a		Probability of Identical Group Means
	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies	
Requirements for Reporting to: Stockholders Public Exchanges	3.96 3.96 3.82	4.16 4.12 4.03	.122 .232 .202
Merger (your company's ability to acquire other firms)	4.99	5.39	.004
Merger (the attractiveness of your firm, if listed, to other firms)	4.56	4.84	.092
Loan Value of Stock for Shareholders	4.67	5.38	.000
Newspaper Publicity on Prices	4.75	5.38	.001
Newspaper Publicity on Volume	4.77	5.34	.003
Current Stockholder Interest	4.74	5.44	.000
Effect on Price Per Share	4.29	4.75	.005
Spread Between Bid and Ask	4.62	5.04	.015

a. The arithmetic averages have the following meanings: 1 = extremely unfavorable; 2 = moderately unfavorable; 3 = slightly unfavorable; 4 = neutral or no effects expected; 5 = slightly favorable; 6 = moderately favorable; and 7 = extremely favorable.

TABLE 4-4

EXECUTIVE LISTING EXPECTATIONS: NEW YORK COMPANY GROUP

How Listing is Expected to Affect:	Arithmetic Means ^a		Probability of Identical Group Means
	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies	
Ownership Base (number of shareholders)	5.00	6.10	.000
Marketability of Stock (saleability)	5.16	6.28	.000
Loss of Sales Support by Over-the-Counter Market Making Dealers	2.52	3.48	.003
Sales of Additional Stock	4.72	5.85	.000
Transactions (volume of sales)	4.68	5.65	.001
Company's Credit Rating	4.20	4.95	.004
Access to Money and Capital Markets	4.68	5.88	.000
Price Volatility of Stock (fluctuations)	3.84	5.20	.000
Offers an "Advertising Value"	4.80	5.25	.080
Analysis of Stock and Company by Potential Investors	5.16	5.88	.004
Prestige for Your Company	4.96	6.18	.000

TABLE 4-4 (cont'd.)

How Listing is Expected to Affect:	Arithmetic Means ^a		Probability of Identical Group Means
	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies	
Requirements for Reporting to: Stockholders Public Exchanges	4.00 4.00 3.84	4.15 4.20 4.30	.451 .306 .110
Merger (your company's ability to acquire other firms)	4.96	5.85	.002
Merger (the attractiveness of your firm, if listed, to other firms)	4.32	4.78	.097
Loan Value of Stock for Shareholders	4.48	4.83	.220
Newspaper Publicity on Prices	4.64	5.23	.028
Newspaper Publicity on Volume	4.88	5.15	.339
Current Stockholder Interest	4.76	5.68	.000
Effect on Price per Share	4.32	5.03	.004
Spread Between Bid and Ask	4.36	5.05	.004

a. The arithmetic averages have the following meanings: 1 = extremely unfavorable; 2 = moderately unfavorable; 3 = slightly unfavorable; 4 = neutral or no effects expected; 5 = slightly favorable; 6 = moderately favorable; and 7 = extremely favorable.

With the exception of the questions dealing with the "loss of sales support" and "reporting requirements" (and the "price volatility of stock" question for the unlisted New York company group), executives, on balance, expect the effects of listing to be positive, that is, greater than 4.0 on the scale employed. Furthermore, in both the American and New York company groups, the mean ratings are always higher for listed companies than unlisted companies.

The differences between listed and unlisted companies are not positive versus negative but are due to the more positive expectations held by executives of listed companies. For example, the expected effects of listing on ownership base by American group companies are shown in Table 4-3 to be 4.66 (slightly favorable) for unlisted companies and 5.60 for listed companies (moderately favorable).

The items having means of less than 4.00 indicate that executives expect the effects of listing on these questions to be negative. However, even in these cases, listed company means are higher. This implies that listed company executives hold less negative expectations, for example, on loss of sales support, than unlisted company executives as shown in Tables 4-3 and 4-4 for the American and New York company groups, respectively.

+3 = 7. An average score of 4.0 implies that executives believe that listing has no effect, whereas an average of 6.0 implies that listing is expected to have effects that will be moderately favorable.

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A univariate F-test of the differences between the unlisted and listed company group means was computed for each of the individual items. The probability associated with the resultant F-ratio is shown in column four in Tables 4-3 and 4-4. The smaller the probability associated with an item, the more likely is that item able to discriminate between listed and unlisted companies.

At the five percent level the differences are significant for 16 of the 22 items asked to the American company group. In the New York company group 15 of the 22 items asked have mean differences that are significant at the five percent level.

Values Assigned to Opinions of Business and Financial Experts

Executives of listed and unlisted companies were requested to indicate the value to them of the opinions of nine professional individuals or groups.³ The range of possible weights (opinion values) is from zero to ten with ten indicating the greatest weight or emphasis. The arithmetic mean of each opinion value for the unlisted and listed company groups is presented in Table 4-5 for the American company group and in Table 4-6 for the New York company group. The three opinions receiving the highest weights are the opinions

³The opinion of Stock Exchange Representatives was inadvertently left off the questionnaire sent to listed company executives. The remaining eight individual or group opinions are discussed in this section and the statistical analysis section. The responses to the opinion value questions are shown in Tables b-69 and b-70 for the American and New York company groups, respectively.

TABLE 4-5

VALUES ASSIGNED TO THE OPINIONS OF BUSINESS AND FINANCIAL
SPECIALISTS: AMERICAN COMPANY GROUP^a

Opinion of	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies		Probability of Identical Group Means
	Rank	Mean Value Assigned to Opinion	Rank	Mean Value Assigned to Opinion	
Company Officers	2	7.64	3	7.18	.244
Board of Directors	1	9.26	1	8.08	.001
Over-the-Counter Dealers	8 ^b	4.40	8	2.39	.000
Investment Bankers	4	6.15	4	6.57	.336
Stockholders	6	5.59	5	5.26	.452
Legal Counsel	5	5.47	6	4.31	.006
Institutional Holders	7 ^b	4.40	7	4.26	.718
Your Own Opinion	3	6.37	2	7.16	.052

a. The range of possible weights (opinion values) is from zero to ten with ten indicating the greatest weight or emphasis.

b. Institutional Holders have a smaller standard deviation than Over-the-Counter Dealers and therefore have been assigned the higher rank even though both means are identical.

TABLE 4-6

VALUES ASSIGNED TO THE OPINIONS OF BUSINESS AND FINANCIAL
SPECIALISTS: NEW YORK COMPANY GROUP^a

Opinion of	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies		Probability of Identical Group Means
	Rank	Mean Value Assigned to Opinion	Rank	Mean Value Assigned to Opinion	
Company Officers	2	7.00	2	7.93	.172
Board of Directors	1	8.44	1	8.58	.792
Over-the-Counter Dealers	7	4.20	8	2.95	.012
Investment Bankers	5	5.20	4	7.00	.002
Stockholders	3	6.44	5	6.13	.665
Legal Counsel	6	4.64	7	4.15	.480
Institutional Holders	8	3.28	6	4.98	.005
Your Own Opinion	4	6.04	3	7.50	.027

a. The range of possible weights (opinion values) is from zero to ten with ten indicating the greatest weight or emphasis.

of internal company representatives: the board of directors, company officers, and the respondents own opinion. The one exception to this ranking was by the New York unlisted company executives who ranked stockholder opinions slightly above their own.

A univariate F-test of the differences between the unlisted and listed company group means was computed for each of the individual opinions. The probability associated with the resultant F-ratio is shown in column five in Tables 4-5 and 4-6. The smaller the probability associated with an opinion value the more likely is the weight placed on that professional opinion to be a good discriminator between listed and unlisted companies.

At the five percent level the differences between means are significant for three of the eight opinion items asked to the American company group.⁴ A fourth opinion, "your own opinion" would tend to be a good discriminate item even though it just misses significance at the five percent level on a univariate test. In the New York company group four of the eight opinion items have mean differences that are significant at the five percent level.

⁴This indicates that there are five chances in a hundred that the unlisted and listed company means came from the same population. The smaller the chance that the groups means come from the same population, the better tends to be the power of that opinion to discriminate between members of unlisted and listed companies. The power to discriminate does not necessarily relate to the position or rank of each variable. Tables 4-5 and 4-6 show that although the rankings are relatively the same within each company group, the means are sufficiently different to be able to discriminate between unlisted and listed companies.

Statistical Analysis

A multiple discriminant function was developed to classify companies as either listers or non-listers. Thirty questions are included in the discriminant equation.⁵ Twenty-two questions consist of executive listing expectations while the remaining eight questions are composed of the values assigned to the opinions of business and finance specialists.

The coefficients for the discriminant function are shown in Table b-71. The format for the determination of each company's score is:

$$\text{score} = x_1X_1 + x_2X_2 + x_3X_3 + \dots x_{30}X_{30}^6$$

A group centroid or mean is developed for unlisted and listed companies. A midpoint between the two group centroids is determined and used as the criterion score for assigning companies to an unlisted or listed category.

The balance of this section presents the statistical findings of the American company group responses followed by the statistical findings of the New York company group responses.

⁵These thirty questions are shown in Tables 4-3 and 4-5 for the American company group and Tables 4-4 and 4-6 for the New York company group.

⁶The capital letters represent the weights answered by the respondents. The non-capitalized letters represent the discriminant coefficients for each variable, where each variable is denoted by the subscript numeral.

American Company Group Analysis

Group centroids and midpoints used in the discriminant analysis classification program are shown in Table 4-7.

TABLE 4-7

DISCRIMINANT SCORES: AMERICAN COMPANY GROUP

Centroids		Mid-Point
Over-the-Counter Companies	Listed Companies	
1.1854	3.5981	2.3917

Each company's score is computed and compared to the mid-point criterion. The company is assigned to the category having the centroid to which it is nearest. The discriminant analysis assignments are compared to the company's actual group membership to determine whether or not the company is correctly classified.

The results of the discriminant analysis assignments are shown in Table 4-8.⁷

⁷An F-test of the discriminant function's ability to significantly differentiate between listed and unlisted companies is given by an F-test of the Wilks' Lambda value, where Wilks' Lambda measures the non-discriminating power of the function. Wilks' Lambda is .426 and is tested for its difference from 1.000, where 1.000 represents no discriminating power. An F-test of this difference gives an F-ratio of 5.354 and a probability of .000. Accordingly the discriminate function does contain the ability to differentiate between listed and unlisted companies.

TABLE 4-8

DISCRIMINANT ANALYSIS CLASSIFICATION:
ORIGINAL RESPONDENTS

American Company Group

Category	Number of Assignments		Percent Correct	t Value ^a
	Total	Correct		
Unlisted Companies	73	64	87.7	6.44
Listed Companies	77	67	87.0	6.50
Unlisted and Listed	150	131	87.3	9.15

a. $t = (\text{proportion correctly assigned} - .5) \div \text{square root of } ((.5(1-.5)) \div N)$.

The results indicate that executive responses to the 30 questions can be used to determine whether or not a company is oriented toward listing on the American exchange.

To verify the results from applying the discriminant analysis methodology a second classification approach was applied. Minimum chi-square values are computed for the individual company's deviations from each of the groups (listed and unlisted) against which the company is compared. The lower the chi-square value, the less the company deviates from the "average member" of that group. The results of the minimum chi-square classification program are shown in Table 4-9.

TABLE 4-9

MINIMUM CHI-SQUARE CLASSIFICATION:
ORIGINAL RESPONDENTS
American Company Group

Category	Number of Assignments		Percent Correct	t value ^a
	Total	Correct		
Unlisted Companies	73	64	87.7	6.44
Listed Companies	77	67	87.0	6.50
Unlisted and Listed	150	131	87.3	9.15

a. The t value is computed from the methodology shown in Table 4-8.

As Table 4-9 portrays, identical results are received when either the minimum chi-square method or the discriminant analysis method is applied to the questionnaire responses.

The above results were obtained by applying the two classification methods to the same data base used in developing the discriminant function. Since an upward bias is possible when the discriminant function data base and group to be assigned are identical, a separate group was surveyed and classified.⁸ This was done with 1971 and 1972 listed

⁸The discriminant coefficients and the chi-square data were developed from the original group of companies which were eligible for listing by mid-1969 and companies which became listed in 1969 and 1970. The data developed from the classification programs were applied to a sample of 36 companies which became listed in 1971 and the first quarter of 1972.

companies to further test the questionnaires ability to differentiate between listed and unlisted companies over time.⁹ The discriminant analysis and minimum chi-square classification results for this group are shown in Table 4-10.

TABLE 4-10

DISCRIMINANT ANALYSIS AND MINIMUM CHI-SQUARE CLASSIFICATION
OF 1971 AND 1972 LISTED COMPANIES

Classification Method	Number of Assignments		Percent Correct	t value ^a
	Total	Correct		
Discriminant analysis	36	28	77.8	3.33
Minimum chi-square	36	29	80.6	3.67

a. The t value is computed from the methodology shown in Table 4-8.

The smallest percent of correct assignments was 77.8 with a t value of 3.33, indicating that the classification results are significantly better than 50 percent or a random assignment.

The multiple discriminant analysis and minimum chi-square programs offer necessary but insufficient information on the listing decision making activity of corporate executives. The discriminating powers of these programs may be due to the differences in weights assigned to identical

⁹Not only were these companies listed approximately one year later than the original group but they were surveyed approximately seven months later.

variables, to the consideration of different variables by the listed and unlisted company executives, or by a combination of both weights and types of variables.

A Cluster Analysis of the Variables

The purpose of applying cluster analysis is to determine if there are "natural" groupings of variables by which a market is judged by corporate executives. Since the cluster program utilizes a generalized distance analysis to cluster successively the variables' responses, groups of responses are formed which contain similar managerial listing effect expectations. (The rating scale utilized in the questions on the valuing of professional opinions requires that those responses be clustered separately.)

The listing expectations variables and their clusters are shown in Tables b-72 and b-73 for the unlisted and listed American companies, respectively. Five of the clusters are almost identical and are shown in Table 4-11.

TABLE 4-11

A COMPARISON OF FIVE "LISTING EXPECTATION" CLUSTERS:
UNLISTED AND LISTED AMERICAN GROUP COMPANIES

Cluster Number	Cluster Name (Expectation Variables)	Included in Cluster of:	
		Unlisted Companies	Listed Companies
1.	<u>Exchange Effects</u>		
	Ownership base	yes	yes
	Marketability of stock	yes	yes
	Transactions (volume)	yes	yes
	Effect on share price	yes	yes
	Spread: between bid and ask	no	yes
2.	<u>Loss of OTC Market Support</u>		
	Loss of sales support	yes	yes
3.	<u>Reporting Requirements</u>		
	Stockholders	yes	yes
	Public	yes	yes
	Exchanges	yes	yes
4.	<u>Newspaper Publicity</u>		
	Price publicity	no	yes
	Volume publicity	yes	yes
5.	<u>Obtainment of Funds</u>		
	Company's credit rating	yes	yes
	Access to capital markets	yes	yes
	Advertising value	yes	no
	Loan value of stock	yes	no

Eleven of the 15 variables included in the five clusters are common to both unlisted and listed companies. In general, it appears that corporate executives of unlisted and listed companies consider the same variables when selecting a market for their company's stock. The discriminating power of these variables, except for the reporting requirements' variables,

is due to the difference in their ratings.¹⁰

The professional opinion variables and their clusters are shown in Tables b-76 and b-77 for the unlisted and listed companies, respectively. A comparison of these two tables is shown in Table 4-12.

TABLE 4-12

A COMPARISON OF FOUR "OPINION VALUE" CLUSTERS:
UNLISTED AND LISTED AMERICAN GROUP COMPANIES

Cluster Number	Opinion Values of	Included in Cluster of:	
		Unlisted companies	Listed companies
1.	Company Officers	yes	yes
	Board of Directors	yes	yes
	Your own opinion	yes	no
2.	Over-the-Counter Dealers	yes	yes
	Investment Bankers	yes	no
3.	Stockholders	yes	yes
	Institutional Investors	yes	no
4.	Legal Counsel	yes	no

Except for one cluster containing the opinion values of company officers and the board of directors, there is little similarity between the clusters. The discriminating power of these variables appears to be due partially to the difference in ratings and partially to the dissimilar groupings of the opinion variables evaluated.

¹⁰ See Table 4-3.

A Factor Analysis of the Variables

The purpose of applying factor analysis is to learn which of the variables, individually or in sets, accounts for the variance in executive expectations and for the variance in the valuing of professional opinions.¹¹ Since factor analysis centers on relationships involving the whole set of variables, it is valuable as a data structuring tool. The analysis of the factors stresses description of the data rather than statistical inference.

Five factors, containing 11 variables, explain 69.1 percent of the variance of the listing expectation variables of the unlisted American companies. Seven factors, containing 14 variables, explain 71.1 percent of the variance of the listing expectation variables of the listed American companies.

Although the percent variance explained is approximately equal for both groups, there are certain variables (questionnaire responses) which are distinct to each group.¹²

Table 4-13 shows the variables which are common or unique in the "listing expectation" factors of unlisted and listed companies.

¹¹The procedure employed to determine the number of factors was to retain factors with an eigenvalue greater than unity. This is a more restrictive criterion than, say, selecting sufficient factors to explain 80 to 90 percent of the variance.

¹²A factor analysis was applied separately to responses of unlisted and listed company executives. The results are shown in Tables b-74 and b-75. Table 4-12 was constructed to present a comparison of the variables which accounted for the variance reported within each group.

TABLE 4-13

VARIABLES COMMON OR UNIQUE WITHIN THE "LISTING
EXPECTATION" FACTORS: UNLISTED AND LISTED
AMERICAN GROUP COMPANIES

Factor Number	Common to Both Groups	Variables Unique Within Factors of:	
		Unlisted Companies	Listed Companies
1.	<u>Exchange Effects Transactions</u>	Marketability Price Effects	
2.	<u>Loss of OTC Market Support</u>	Loss of Support Volatility	Prestige Advertising Value
3.	<u>Reporting Requirements:</u> Stockholders Public Exchanges		
4.	<u>Newspaper Publicity Publicity on Volume</u>		Publicity on Price
5.	<u>Obtainment of Funds Access to Capital Markets, Company's Credit Rating</u>	Analysis of Stock	
6.	<u>(No Common Name)</u>		Sales of Addi- tional stock Merger (ability to acquire) Loan value of stock
7.	<u>(No Common Name)</u>		Merger (attract- iveness of your firm to other firms) Loss of Sales Support

To the extent that executives follow their beliefs and expectations (and the discriminant analysis indicates that they follow their expectations), factor analysis may give a clue to the variables which are most important in the listing decision.

The variables unique within the unlisted company responses concern, generally, the desire to "maintain markets" as evidenced by the factors' contents: marketability (saleability), price effects, loss of dealer support, volatility of stock prices, and analysis of stock and company. The variables unique within the listed company factors consist of two general types of expectations: 1. "attention attracting", and 2. "financial considerations." The "attention attracting" variables are: prestige, advertising value, price publicity, and merger (the attractiveness of the firm if listed). The "financial considerations" set of variables include: sales of additional stock, merger (listed company's ability to acquire other firms), loan value of stock, and the company's credit rating.

The variables which are common or unique in the "opinion value" factors of unlisted and listed companies are shown in Table 4-14. (The factor analysis results for unlisted and listed companies are shown in Tables b-78 and b-79, respectively.)

TABLE 4-14

VARIABLES COMMON OR UNIQUE WITHIN THE "OPINION VALUE"
 FACTORS: UNLISTED AND LISTED
 AMERICAN GROUP COMPANIES

Factor Number	Common to Both Groups	Variables	
		Unique Within Factors of:	
		Unlisted Companies	Listed Companies
1.	Company Officers Board of Directors your own opinion		
2.	Institutional Investors	Stockholders	Legal Counsel
3.		Over-the- Counter Dealers Investment Bankers	
4.		Legal Counsel	

The primary difference between the two groups is due to factor number three for the unlisted companies which include the opinions of over-the-counter dealers and investment bankers and accounts for 19.1 percent of the variance within that group. These two opinions, like the listing expectation variables unique to unlisted companies, tend to show concern with maintaining markets.

New York Company Group Analysis

Group centroids and midpoints used in the discriminant analysis classification program are shown in Table 4-15.

TABLE 4-15

DISCRIMINANT SCORES: NEW YORK COMPANY GROUP

Centroids		
Over-the-Counter Companies	Listed Companies	Mid-Point
3.2791	4.6794	3.9793

Each company's score is computed and compared to the mid-point criterion. The company is assigned to the category having the centroid to which it is nearest. The discriminant analysis assignments are compared to the company's actual group membership to determine whether or not the company is correctly classified.

The results of the discriminant analysis assignments are shown in Table 4-16.

TABLE 4-16

DISCRIMINANT ANALYSIS CLASSIFICATION:
ORIGINAL RESPONDENTS

New York Company Group

Category	Number of Assignments		Percent Correct	t value ^a
	Total	Correct		
Unlisted Companies	25	25	100.0	50.00
Listed Companies	40	37	92.5	5.38
Unlisted and Listed	65	62	95.4	8.06

a. The t value is computed from the methodology shown in Table 4-8.

The results indicate that executive responses to the 30 questions can be used to determine whether or not a company is oriented toward listing on the New York Stock Exchange.

To verify the results from applying the discriminant analysis methodology a second classification approach was applied. Minimum chi-square values are computed from the individual company's deviations from each of the groups (listed and unlisted) against which the company is compared. The lower the chi-square value, the less the company deviates from the "average" member of that group. The results of the minimum chi-square classification program are shown in Table 4-17.

TABLE 4-17

MINIMUM CHI-SQUARE CLASSIFICATION:
ORIGINAL RESPONDENTS

New York Company Group

Category	Number of Assignments		Percent Correct	t value ^a
	Total	Correct		
Unlisted Companies	25	25	100.0	50.00
Listed Companies	40	37	92.5	5.38
Unlisted and Listed	65	62	95.4	8.06

a. The t value is computed from the methodology shown in Table 4-8.

As Table 4-17 portrays, identical results are received when either the minimum chi-square method or the discriminant analysis method is applied to the questionnaire responses.

The above results were obtained by applying the two classification methods to the same data base used in developing the discriminant functions. Since an upward bias is possible when the discriminant function data base and group to be assigned are identical, a small, separate group was classified. This was done with 1971 listed companies which came from the original data source of unlisted companies which subsequently became listed. These seven companies were not used in the development of either of the classification methods.

No test of hypothesis was applied because the degrees of freedom were so low; however, five out of seven companies (71.4 percent) were correctly classified under each classification program.

Except for the special 1971 listed group for which a t test was not applied, the percent of companies correctly assigned was significant at the one percent level. The results are significantly better than 50 percent or a random assignment.

A Cluster Analysis of the Variables

Cluster analysis is applied to determine if there are "natural" groupings of variables by which a market is judged by corporate executives. The listing expectation variables and their clusters are shown in Tables b-80 and b-81 for the

unlisted and listed New York companies, respectively. Five of the clusters are very similar and are shown in Table 4-18.

TABLE 4-18

A COMPARISON OF FIVE "LISTING EXPECTATION" CLUSTERS:
UNLISTED AND LISTED NEW YORK COMPANIES

Cluster Number	Cluster Name (Expectation Variables)	Included in Cluster of:	
		Unlisted Companies	Listed Companies
1.	<u>Exchange Effects</u>		
	Ownership base	yes	yes
	Marketability	yes	no
	Transactions	yes	yes
	Stockholder interest	yes	yes
	Effect on share price	yes	yes
2.	<u>Loss of OTC Market Support</u>		
	Loss of sales support	yes	yes
	Price volatility	yes	no
	Loan value of stock	no	yes
3.	<u>Reporting Requirements</u>		
	Stockholders	yes	yes
	Public	yes	yes
	Exchanges	yes	yes
4.	<u>Corporate Visibility</u>		
	Advertising value	yes	yes
	Analysis of stock	yes	yes
	Prestige	no	yes
	Marketability	no	yes
5.	<u>Obtainment of Funds</u>		
	Sale of additional stock	yes	no
	Company's credit rating	yes	yes
	Access to capital markets	yes	yes
	Prestige	yes	no
	Price publicity	yes	no

Twelve of the 18 variables included in the five clusters are common to both unlisted and listed companies. If only

four clusters are viewed, ten of fourteen variables are common to both groups.

In general, it appears that corporate executives of unlisted and listed companies consider similar variables when selecting a market for their company's stock. The discriminating power of these variables (except for the reporting requirements' variables) is due primarily to the differences in their ratings.¹³ However, as the fifth cluster shows, unlisted company executives tend to include in their clusters more variables than listed companies. Therefore, a portion of the discriminating power is partially due to the consideration of different variables.

The professional opinion variables and their clusters are shown in Tables b-84 and b-85 for the unlisted and listed companies, respectively. A comparison of these two tables is shown in Table 4-19. Except for one cluster containing the opinion values of company officers, board of directors, and stockholders, there is little similarity between the clusters.

The discriminating power of these variables appears to be due partially to the differences in ratings and partially to the dissimilar groupings of the opinion variables evaluated.

¹³See Table 4-4.

TABLE 4-19

A COMPARISON OF THREE "OPINION VALUE" CLUSTERS:
UNLISTED AND LISTED NEW YORK COMPANIES

Cluster Number	Opinion Value of	Included in Cluster of:	
		Unlisted Companies	Listed Companies
1.	Company Officers	yes	yes
	Board of Directors	yes	yes
	Stockholders	yes	yes
2.	Over-the-Counter Dealers	yes	yes
	Investment Bankers	yes	no
	Institutional Investors	yes	no
	Your own opinion	yes	no
3.	Legal Counsel	yes	no

A Factor Analysis of the Variables

The purpose of applying factor analysis is to learn which of the variables, individually or in sets, accounts for the variance in executive expectations and for the variance in the valuing of professional opinions. The analysis of the factors stresses description of the data rather than statistical reference.

Seven factors, containing 15 variables, explain 79.6 percent of the variance of the listing expectation variables of the unlisted New York companies. Seven factors, containing 16 variables, explain 72.9 percent of the variance of the listed New York companies.

Table 4-20 shows the variables which are common or unique in the "listing expectation" factors of unlisted and listed companies. (The factor analysis results are shown in

Tables b-82 and b-83, for the unlisted and listed New York companies, respectively.)

To the extent that executives follow their beliefs and expectations (and the discriminant analysis indicates that they follow their expectations), factor analysis may give a clue to the variables which are most important in the listing decision.

The variables unique within the unlisted company responses concern, generally, the desire to "maintain markets" as evidenced by the factors' contents: Marketability, price volatility, loan value of stock, effect on share price, and spread between bid and ask. The variables unique within the listed company factors consist of two general types of expectations: 1. "attention attracting", and 2. "financial considerations." The "attention attracting" variables are: prestige, analysis of stock, price publicity, volume publicity and merger (the attractiveness of your firm if listed). The "financial considerations" set of variables include: sales of additional stock and loan value of stock.

The variables which are common or unique in the "opinion value" factors of unlisted and listed companies are shown in Table 4-21. (The factor analysis results for unlisted and listed companies are shown in Tables b-86 and b-87, respectively.)

TABLE 4-20

VARIABLES COMMON OR UNIQUE WITHIN THE "LISTING
EXPECTATION" FACTORS: UNLISTED AND LISTED
NEW YORK COMPANIES

Factor Number	Common to Both Groups	Unique Within Factors of:	
		Unlisted Companies	Listed Companies
1.	<u>Exchange Effects</u> Ownership Base Transactions	Marketability	
2.	<u>Loss of OTC Market</u> <u>Support</u> Loss of Sales Support	Price Volatility	Loan Value of Stock
3.	<u>Reporting Require-</u> <u>ments</u> Stockholders Public Exchanges		
4.	<u>Corporate Visibility</u> Advertising Value	Merger (attractive- ness of your firm)	Prestige Analysis of Stock
5.	<u>Obtainment of Funds</u> Company's Credit Rating Access to Capital Markets		
6.	(<u>No Common Name</u>)	Loan Value of Stock	Price Publicity Volume Publicity
7.	(<u>No Common Name</u>)	Effect on Share Price Spread Between Bid and Ask	Sales of Additional Stock Merger (attrac- tiveness of your firm to other firms)

TABLE 4-21

VARIABLES COMMON OR UNIQUE WITHIN THE "OPINION
VALUE" FACTORS: UNLISTED AND LISTED
NEW YORK COMPANIES

Factor Number	Variables		
	Common to Both Groups	Unique Within the Unlisted Companies	Factors of: Listed Companies
1.	Board of Directors Stockholders		
2.	Institutional Investors Your own opinion		
3.		Legal Counsel	Over-the- Counter Dealers

The first two factors are common to both unlisted and listed companies. The third factor for each group accounts for approximately 15 percent of the variance within their respective groups; however, these factors and their single variables are unique to each group. The unlisted company variable is the opinion of legal counsel whereas the listed company variable that accounts for 16 percent of the variance is the opinion value of the over-the-counter dealers.

It appears that the discriminating power of the opinion variables is due to both the differences in ratings of similar opinions and to the consideration of different opinions by unlisted and listed companies.

CHAPTER V

CONCLUSIONS AND IMPLICATIONS FOR FUTURE RESEARCH

Introduction

As indicated in Chapter I the purposes of investigating the listing decision are:

1. to ascertain the crucial variables that are analyzed and evaluated.
2. to learn which variables are given the greatest emphasis in the choice of markets.
3. to determine those individuals or groups which tend to have the strongest influence on the listing decision.
4. to develop a discriminant function that classifies firms as either listers or nonlisters.

The first section of the chapter contains the conclusions and consists of five parts. The first four parts parallel the above cited reasons for studying the listing decision. The fifth part relates executive expectations to prior research and other financial literature. The second section covers the limitations and applications of the study, concluding with the implications for further research.

The three techniques of cluster analysis, factor analysis, and discriminant analysis were employed to obtain maximum inferences from the data. The sequencing of these techniques

points out the variables considered, the importance of the variables in the listing decision process, and finally how the variables may be used to assign companies as nonlisters or listers according to managerial expectations.¹

Conclusions

The perspective taken is to present conclusions which are specific, yet generalizable to all companies or generalizable to all unlisted or listed companies having characteristics which, at the very least, are equal to the minimal numerical requirements of the American Stock Exchange.

Rather than present conclusions which are applicable solely within one of the four company groups (unlisted American, listed American, unlisted New York, listed New York),

¹Cluster analysis separates the executive responses into groups such that each response is more like other responses in its group than like responses outside the group. One of the major problems in marketing and in finance consists of the orderly classification of myriad data. The cluster analysis technique, by an orderly classification of executive responses, organizes the crucial variables that are analyzed and evaluated. To learn which of the variables are given the greatest emphasis in the choice of markets, a second technique, that of factor analysis, was used. In this technique interest is centered on the responses in the sense that the questionnaire responses are summarized in terms of a smaller set of linear combinations that preserve most of the information in the original set of responses. The variables given the greatest emphasis in the choice of markets are those questionnaire responses which are contained in the smaller set of linear combinations of responses. The third technique, multiple discriminant analysis, establishes a procedure for assigning individuals to one or more mutually exclusive groups. This technique indirectly supports the factor analysis technique by determining which variables account most for intergroup differences in average profile. The higher the proportion of correctly classified companies from the multiple discriminant function, the more certain is it that the relevant listing decision variables have been found.

additional criteria have been employed when the inferences from the cluster analysis (part one) and factor analysis (part two) are presented.²

The Variables Analyzed and Evaluated

The values assigned to the listing expectation variables differ between unlisted and listed companies of both the American and New York Company groups; however, certain variables tend to converge within clusters having similar characteristics. The listing expectation variables, considered and evaluated by all groups, are shown in Table 5-1.

²First, a listing expectation variable or an opinion value is concluded to be an important component in the listing decision process if it is found within each of the four groups. Second, a variable or an opinion will be included among the conclusions if it is found within the cluster analysis or factor analysis of both unlisted groups (American and New York) and is not found in either of the listed groups, or if a variable or an opinion is found within both listed groups and is not found in either of the unlisted groups. Therefore, the conclusions will be applicable either to all groups or only to unlisted or listed companies, whether of the American or New York group.

TABLE 5-1

LISTING EXPECTATION VARIABLES: CONSIDERED
AND EVALUATED BY ALL COMPANY GROUPS

Composite Cluster (items)
<u>Exchange Effects</u>
Ownership base
Marketability
Transactions
<u>Loss of OTC Market Support</u>
Loss of Sales Support
<u>Reporting Requirements</u>
Stockholders
Public
Exchanges
<u>Obtainment of Funds</u>
Company's Credit Rating
Access to Capital Markets

Source: Constructed from Tables b-72, b-73,
b-80, and b-81.

Although additional variables are evaluated within each company group, the items shown in Table 5-1 are concluded to be the variables, in general, which executives tend to consider and evaluate in the listing decision process.

The Variables Given the Greatest Emphasis

Certain listing expectation variables of unlisted and listed companies in both the American and New York company

groups are represented among the various factors which, on the average, account for approximately 70 percent of the variance within each company group. The listing expectation variables which help to account for the variance explained within each company group are shown in Tables 5-2 and 5-3.

TABLE 5-2

LISTING EXPECTATION VARIABLES: PARTIALLY
ACCOUNTING FOR THE VARIANCE WITHIN
FACTORS OF ALL COMPANY GROUPS

Variables
Transactions
Loss of Sales Support
Reporting Requirements to: Stockholders Public Exchanges
Company's Credit Rating
Access to Capital Markets

Source: Constructed from Tables b-74, b-75,
b-82 and b-83.

The seven variables shown in Table 5-2 are concluded to be among the more important listing decision variables for two reasons. First, they are among the variables which account for the explained variance of the factor analysis, and second, these variables are found in the listing expectation factors derived from the expectations of executives in each of the categories, i.e., unlisted and listed, American and New York

companies. However, these are not the only important variables. Table 5-3 contains three additional variables which appear to be of prominence within certain categories.

TABLE 5-3

LISTING EXPECTATION VARIABLES: PARTIALLY
ACCOUNTING FOR THE VARIANCE WITHIN
FACTORS OF SOME COMPANY GROUPS

Variables	American Companies		New York Companies	
	Unlisted	Listed	Unlisted	Listed
Marketability	yes	no	yes	no
Sales of Additional Stock	no	yes	no	yes
Merger (attractiveness of your firm to other firms)	no	yes	no	yes

Source: Constructed from Tables b-74, b-75, b-82, and b-83.

The "marketability" variable is among those variables contained solely in the factors of unlisted companies whereas the variables covering "sales of additional stock" and "merger (attractiveness of your firm to other firms)" are among those variables contained solely in the factors of listed companies. These three variables are concluded to be important listing decision variables within their relevant company groups.³

³The reasons these variables are concluded to be important are: 1) they are among the variables which account for the explained variance, and 2) these variables are found in the listing expectation factors of executives in a relevant category, that is, found only among unlisted or listed companies.

Another way of presenting the variables that tend to explain best the listing decision is to consolidate Tables 5-2 and 5-3 and restructure the results according to type of market, that is unlisted or listed. The restructured results are shown in Table 5-4.

TABLE 5-4

LISTING EXPECTATION VARIABLES ACCOUNTING
FOR THE CHOICE OF MARKETS FOR A
COMPANY'S COMMON STOCK

Unlisted Company	Variables	Listed Companies
Transactions		Transactions
Loss of Sales Support		Loss of Sales Support
Reporting Requirements to: Stockholders Public Exchanges		Reporting Requirements to: Stockholders Public Exchanges
Company's Credit Rating		Company's Credit Rating
Access to Capital Markets		Access to Capital Markets
Marketability		Sales of Additional Stock
		Merger (attractiveness of your firm to other firms)

Source: Constructed from Tables 5-2 and 5-3.

The Individuals and Groups Influencing
the Listing Decision

The opinions which accounted for the variance within the factors of each of the four groups are shown in Appendix b.⁴

⁴See Tables b-78, b-79, b-86 and b-87.

Those opinions which help to account for the variance explained and are common to all four groups, i.e., unlisted and listed, American and New York, are shown in Table 5-5.

TABLE 5-5

OPINIONS PARTIALLY ACCOUNTING FOR
THE VARIANCE WITHIN FACTORS
OF ALL COMPANY GROUPS

Opinions of:
Board of Directors
Your Own Opinion
Institutional Investors

Source: Constructed from Tables b-78, b-79,
b-86 and b-87.

These three sources of opinions, while common to all groups may be supplemented by the opinion values of "legal counsel" which are found solely within the factors of unlisted companies of both the American and New York stock exchanges.

If the foregoing opinions are consolidated according to type of market, that is, unlisted or listed, then the results can be summarized as shown in Table 5-6.

TABLE 5-6

OPINION VALUES WITHIN THE FACTORS
OF UNLISTED AND LISTED
COMPANY EXECUTIVES

Opinions of:	
Unlisted Groups	Listed Groups
Board of Directors	Board of Directors
Your Own Opinion	Your Own Opinion
Institutional Investors	Institutional Investors
Legal Counsel	

Source: Constructed from Tables b-78, b-79, b-86 and b-87.

Although these opinions help to explain the variance within their respective group factors, it appears that the value assigned to institutional investors is very low.⁵

It would seem that, in general, for all companies, the two most important decision-making sources of influence are the Board of Directors and "your own opinion", that is, the opinion of the company president. However, since these are internal sources, it may be that institutional investors for all groups, and legal counsel for unlisted groups, in general,

⁵Out of eight possible positions the opinion value assigned to institutional investors by executives of unlisted and listed American companies ranked 7 and according to the weights assigned by unlisted and listed New York companies, the value of institutional investors ranked 8 and 6, respectively. A low value assigned to an opinion indicates that, looked at individually, certain opinions are not heavily weighted; however, when taken in context with other opinion variables, it may be used to explain how the listing decision is made. Additional studies are required and will be discussed under the section covering implications for future research.

tend to exercise the greatest external influence on the listing decision process.⁶

The Classification of Firms as Listers or Non-Listers

The hypothesis as stated in Chapter I is:

Unlisted and listed companies can be identified and classified based on how executives value the opinions of professional finance and business personnel and on how executives perceive the efficacy of the exchange trading market.

A test of proportions was applied to determine if the percent of correctly assigned differed significantly from 50 percent or a random assignment. A summary of the tests of classification results from Chapter IV is presented in Table 5-7.

⁶A "strong influence in the listing decision process" is construed to mean those opinions which tend to account for the most explained variance in a factor analysis of the opinions studied.

TABLE 5-7

MINIMUM CHI-SQUARE CLASSIFICATION RESULTS

Group	Total	Correct	Percent Correct	t Value	Level of Significance
Unlisted American	73	64	87.7	6.44	.001
Listed American	77	67	87.0	6.50	.001
Unlisted New York	25	25	100.0	50.00	.001
Listed New York	40	37	92.5	5.38	.001
1971-72 Listed American	36	28	77.8	3.33	.010
1971 Listed New York	7	5	71.4	a	a

a. No test of hypothesis applied because of the small number of degrees of freedom.

In the four original groups, unlisted and listed, American and New York, the level of significance is .001. In the "Special" American Exchange 1971-72 listed group, the results were significant at the one percent level.⁷ The "Special" 1971 listed New York group had insufficient degrees of freedom for a meaningful test of hypothesis to be constructed.

The four original groups differ significantly from a 50 percent or random assignment. The Special 1971-72 listed company sample verifies the original American group results.

⁷ The Special 1971-72 Listed American Group was a separate study classified by the data developed from the original unlisted and listed American groups.

With these findings the hypothesis that unlisted and listed companies can be identified and classified based on how executives value the opinion of professional finance and business personnel and on how executives perceive the efficacy of the exchange trading market is accepted.

Financial Literature and Executive Listing Expectations

The conclusions confirm, on a national basis, the findings of James E. Walter's study of 19 regional companies that loss of dealer support is an important listing decision variable.

The writings of five authors, who succinctly summarize the available literature, have been consolidated into two schedules: the advantages and disadvantages of listing.⁸

Executives, on the average, hold positive expectations regarding most of the advantages of listing.⁹ Five of the stated advantages are concluded to be important components in the listing decision process.¹⁰

⁸Supra, pp. 9, 10.

⁹One of the stated advantages "makes possible margin trading" was not included in the questionnaire because the majority of unlisted companies included in this study became eligible for margin trading on July 8, 1969, when the Federal Reserve published its initial OTC Margin Stock List.

¹⁰The five variables, shown in Table 5-4 are: marketability; company's credit rating; access to capital markets; sales of additional stock; and merger (attractiveness of your firm if listed). A sixth variable, transactions, could possibly be subsumed as one of the expected advantages of listing.

Of the disadvantages of listing, executives, on the average, hold negative expectations on the "loss of broker support," are basically neutral regarding the "onerousness of reporting requirements," are not interested in a "voluntary delisting option," and finally, tend not to consider the "additional expense burden" as an important portion of the listing decision.¹¹

Meaningful responses were not obtained in the survey regarding the stated disadvantages covering the "loss of management control" and the possible "over-emphasis of the short-run."

It is true that listing on an exchange increases reporting requirements, adds to the expense burden and is normally irrevocable by the company on a voluntary basis. However, this study indicates that executives in general no longer tend to include these variables as disadvantages of listing.

Implications of Future Research

Applications of Research Findings

The financial literature can be updated by removing those stated disadvantages of listing, which, although true, do not appear to be relevant decision-making variables.

¹¹The two variables: "loss of broker support" and "reporting requirements" are shown in Table 5-4 and are part of the conclusions reached in the second part of this section. The data for the statement pertaining to a "voluntary delisting option" are presented in Tables b-43 and b-44 for the American and New York groups, respectively. The data for the statements pertaining to the imposition of an "additional expense burden" are presented in Tables b-65 and b-66, for the American and New York groups, respectively.

The listing expectation variables accounting for the choice of markets for a company's common stock can be utilized by executives of smaller, growing companies two ways: first, to have a basis of comparison with more experienced companies having similar characteristics, and second, to reduce the search time for the more important variables included in the listing decision process.

Finally, the listing expectation variables and the opinion values can be utilized by the Market Development Section of the American and New York Stock Exchanges to determine which of the eligible unlisted companies are the best listing prospects.¹²

Limitations of the Research

The survey approach itself contains certain limitations that may affect conclusions reached. Two primary problems are non-responses and the interpretation of the questions by survey recipients. These limitations should be considered

¹²The higher the multiple discriminant analysis score, the more favorable are the expectations regarding the exchange market. The exchanges' personnel can more efficiently utilize their time by contacting those company executives who are most favorably disposed to listing (as indicated by their high discriminant score).

when interpreting the research results.¹³

The conclusions are limited to companies having attained financial characteristics and size at least equal to the minimum requirements of the American exchange. And the conclusions are limited also to the types of industries included in this study. Finally, even though the variables and opinions presented in the conclusions are applicable either to all company groups studied or to unlisted and listed company groups, the classification and assignment of a specific company must be accomplished by utilizing data developed within the exchange group for which the company meets the minimum numerical listing requirements.

Future Research

Companies smaller than those included in this research could be studied to determine if regional exchanges may utilize similar approaches to contact companies for original listing. Regulated companies and financial institutions could be studied to determine whether or not the same results are found in these industries. The results from these industries and the findings from the smaller companies could be

¹³ Checks on the questions dealing with expenses, professional opinion values, and contacts with exchanges indicated that there was internal consistency and interpretation. Non-responses could not be avoided; however, as stated in Chapter III, it was not until six weeks after the original mailing that the second request was sent. The replies to the second and third mailings were used as proxy variables for non-responses from the original mailing. There were no significant differences between the first set of responses and the next two sets of responses. No further action was taken regarding those who did not respond to the second and third request letters.

used to extend the conclusions to more groups. The Market Development section of the exchanges may be able to use this new information to market the exchanges prior to the time that companies meet their eligibility requirements.

Further research on executive expectations would contribute to the recently completed research. The new studies could attempt to answer the following types of questions. First, what causes executive expectations to change over time? This could be done by recontacting the executives of unlisted companies who responded to this study, since changes in their expectations are probably necessary in order for them to be willing to list their stock. Second, are executive expectations met? Two studies would have to be undertaken to answer this question. One study would be to survey the listed company executives who responded and the second study would investigate the actual changes which took place in certain variables, namely, transactions (volume) and ownership base. And third, do executives use listing (or the stated intention to list) as a vehicle to facilitate distribution of sales of stock? This question could be answered by contacting the executives and by a library research of stock sales which took place within a period of plus or minus twelve months from the date of listing.

The answers to these questions may shed some light on whether or not there are certain self-fulfilling executive expectations!

APPENDICES

APPENDIX A
QUESTIONNAIRES SENT TO UNLISTED
AND LISTED COMPANY EXECUTIVES

UNLISTED COMPANY QUESTIONNAIRE

I. PLEASE CIRCLE, CHECK (✓), OR FILL-IN THE ANSWER.

Your title (position in company): _____

Age: 26-35 _____	Educational level: high school _____
36-45 _____	some college _____
46-55 _____	Bachelor's degree _____
56-65 _____	some advanced work _____
65 and over _____	Master's degree _____
	Ph.D. _____
	Other _____

Have you taken an investments course or seminar on the stock market since 1964? Yes _____ No _____

Does your company have:

An investor relations Program?	Yes _____ No _____
An Individual Responsible for Investor Relations?	Yes _____ No _____
A stock option plan for executives?	Yes _____ No _____
An employee (other than executives) stock purchase plan?	Yes _____ No _____

Who (what position - president, vice-president, etc.) authorizes the final release of investor information? Position _____

If any of the following types of financial specialists are on your Board of Directors, please indicate how many.

Number	
_____	Stock Broker/Dealer
_____	Investment Banker
_____	Commercial Banker
_____	Insurance Executive
_____	Financial Analyst/Writer
_____	Other (Specify) _____

Approximately how many Broker/Dealers make a market in your stock? Number _____

Approximately how many institutions hold stock in your company? Number _____

How frequently does your company do the following:	Never	Quarterly	Semi-Annually	Annually	Other (Specify)
Send balance sheet information to common stockholders	_____	_____	_____	_____	_____
Send income statement information to common stockholders	_____	_____	_____	_____	_____
Send balance sheet information to the financial press or wire services	_____	_____	_____	_____	_____
Send income statement information to the financial press or wire services	_____	_____	_____	_____	_____
Solicit proxies from common stockholders	_____	_____	_____	_____	_____
Send other types of information to company stockholders	_____	_____	_____	_____	_____

What is the approximate number of contacts per month on company business between yourself and financial analysts or brokers (and by whom initiated)?

	Initiated by	
Type of Contact	Yourself	Analysts or Brokers
Personal	_____	_____
Telephone	_____	_____
Written	_____	_____

Does your company plan on selling additional common stock within the next three years?

Yes _____ No _____ No Comment _____ Undecided _____

I.D. _____

Unlisted (cont'd.)

II. PLEASE ESTIMATE WHAT YOU BELIEVE THE EFFECTS WOULD BE ON THE FACTORS LISTED BELOW IF YOUR STOCK WERE TO BE LISTED. PLEASE RATE THE FACTORS FOR EACH EXCHANGE SHOWN FROM -3 THROUGH +3; WHERE -3 MEANS EXTREMELY UNFAVORABLE, -2 MODERATELY UNFAVORABLE, -1 SLIGHTLY UNFAVORABLE, 0 MEANS NO EFFECT WHEN LISTED, +1 SLIGHTLY FAVORABLE, +2 MODERATELY FAVORABLE, AND +3 EXTREMELY FAVORABLE.

Factors	For Your Company If It Were To Be Listed On:																			
	New York Stock Exchange						American Stock Exchange				Midwest Stock Exchange									
	Unfavorable	-3	-2	-1	Neutral	0	Favorable	+1	+2	+3	Unfavorable	-3	-2	-1	Neutral	0	Favorable	+1	+2	+3
Ownership Base: (Number of shareholders)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Marketability of Stock (Saleability)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Management Control	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loss of Sales Support by Over-the-Counter Market-Making Dealers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sales of Additional Stock	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transactions (Volume of Sales)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Company's Credit Rating	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Access to Money and Capital Markets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Price Volatility of Stock (fluctuations)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Offers an "Advertising Value"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Analysis of Stock and Company by potential investors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prestige for your Company	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Emphasis on Short-Run Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Requirements for Reporting to:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stockholders	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Public	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exchanges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Merger (Your company's ability to acquire other firms)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Merger (The attractiveness of your firm, if listed, to other firms)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loan Value of Stock for Shareholders	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Newspaper Publicity on Prices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Newspaper Publicity on Volume	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Current Stockholder Interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Affect on Price per Share	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spread Between "Bid" and "Ask"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

III. THE FOLLOWING STATEMENTS RELATE TO EXPENSES ASSOCIATED WITH LISTING. FOR EACH OF THE EXCHANGES SHOWN, PLEASE INDICATE WHETHER THE FOLLOWING STATEMENTS WOULD BE CONSIDERED A SIGNIFICANT VARIABLE IN THE PROCESS OF DECIDING WHETHER TO LIST OR REFRAIN FROM LISTING. (PLEASE CIRCLE EITHER YES OR NO.) TO ASSIST YOU IN RESPONDING TO CERTAIN QUESTIONS, THE TABLE BELOW CONTAINS FOUR EXCHANGES AND THE FEES THAT THEY WOULD CHARGE IF TWO MILLION SHARES WERE TO BE LISTED.

Fee Type	New York	American	Midwest	Pacific Coast
Initial Listing Fee	35,000	12,500	2,500	2,500
Annual Maintenance Fee	5,000	2,000	250	250

	New York		American		Midwest		Pacific Coast	
	Yes	No	Yes	No	Yes	No	Yes	No
Other things being equal, the fees shown above preclude your listing your stock.								
The above fees are considered an important portion of the total listing decision-making process.	Yes	No	Yes	No	Yes	No	Yes	No
The requirements of maintaining Transfer Agent and Registrar offices in a location other than (or in addition to) your company's offices.	Yes	No	Yes	No	Yes	No	Yes	No
Expenses associated with the exchanges reporting requirements to themselves and to stockholders.	Yes	No	Yes	No	Yes	No	Yes	No
The <u>total</u> expenses associated with listing preclude your listing your stock.	Yes	No	Yes	No	Yes	No	Yes	No
If you were to be listed on the New York or the American, would the fees shown in the table above deter you from having your stock also listed on a Regional exchange (known as a "dual" listing).	Yes	No	Yes	No	Yes	No	Yes	No

Unlisted (Cont'd.)

IV. PLEASE INDICATE YOUR BELIEFS AND OPINIONS BY CHECKING OR FILLING-IN THE ANSWERS TO THE FOLLOWING QUESTIONS.

Does your company meet the listing requirements of:

	Yes	No	Do Not Know
New York Stock Exchange	___	___	___
American Stock Exchange	___	___	___
Midwest Stock Exchange	___	___	___
Pacific Coast Stock Exchange	___	___	___
Other Regional Exchanges	___	___	___
(Please specify) _____	___	___	___

Has your company discussed (internally) the possibility of listing its stock on an exchange within the past three years?

Yes ___ No ___ No Comment ___

Please indicate the weight that you believe should be assigned to the opinion of the following groups or individuals if you were to discuss with them the possibility of listing your company's stock. (Please indicate weight from 0 to 10 with 10 indicating the greatest weight.)

	Weight
Company Officers	___
Board of Directors	___
Over-the-Counter Market Making Dealer(s)	___
Stock Exchange Representative(s)	___
Investment Banker(s)	___
Stockholders	___
Legal Counsel	___
Institutional Investors	___
Your own opinion	___
Others (Please specify) _____	___

If it were possible to voluntarily delist your common stock after a year's trial run on an exchange, would this significantly affect your listing decision? Yes ___ No ___

Have you discussed (within the past three years) with any of the over-the-counter dealers who "make a market" in your stock the possibility of listing your company's stock on a stock exchange?

Yes ___ No ___ No Comment ___

If yes to the above, the over-the-counter dealer's attitude toward the listing of your stock was:

Substantially Against	Neutral	Substantially Favorable
-3 -2 -1	0	+1 +2 +3

What were the essential reasons supporting their attitude?

Has your company communicated with any exchange representatives since 1968 regarding the possibility of listing your stock?

Yes ___ No ___

If yes, what type of contact and who initiated the contact:

Type of Contact

Personal
Telephone
Written

Initiated by				
Your Company	New York	American	Midwest	Other
___	___	___	___	___
___	___	___	___	___
___	___	___	___	___

Does your company plan on eventually listing its stock on an exchange?

Yes ___ No ___ Undecided ___ No Comment ___

If yes, on which exchange(s)?

New York ___ Pacific Coast ___
 American ___ Other Regional Exchanges ___
 Midwest ___ (Please specify) _____

If your company were to be listed on either the American or New York Stock Exchange, would you consider also a "dual listing," that is, listing on a Regional Exchange?

Yes ___ No ___

If yes, on which Regional Exchange(s)?

Boston ___ Phila-Balt-Wash ___
 Cincinnati ___ Pittsburgh ___
 Detroit ___ Salt Lake ___
 Midwest ___ Spokane ___
 Pacific Coast ___

Has your company requested listing on an exchange within the past three years?

Yes ___ No ___ No Comment ___

If yes, for which exchange(s)?

New York ___ Pacific Coast ___
 American ___ Other Regional Exchanges ___
 Midwest ___ (Please specify) _____

Do you wish to be quoted or remain anonymous?

Anonymous ___ Quoted ___

V. OPEN-END QUESTIONS THAT MAY SUGGEST TO YOU CERTAIN OPINIONS, OBSERVATIONS AND EXPERIENCES ABOUT WHICH YOU MAY WISH TO ELABORATE. PLEASE FEEL FREE TO USE THE BLANK FOURTH PAGE FOR YOUR (HANDWRITTEN, IF YOU WISH) ANSWER.

Why has your company refrained from listing its common stock on an exchange? (For example, are you waiting until your company is well above the exchange's minimum listing requirements? Are there internal factors that must be evaluated?)

How should a company market or have marketed its common stock? (What types of approaches and services would you recommend to develop knowledge of and acceptance of your company's stock in the marketplace?)

LISTED COMPANY QUESTIONNAIRE

I. PLEASE CIRCLE, CHECK (✓), OR FILL-IN THE ANSWER.

Your title (position in company): _____

Age: 26-35	_____	Educational level: high school	_____
36-45	_____	some college	_____
46-55	_____	Bachelor's degree	_____
56-65	_____	some advanced work	_____
65 and over	_____	Master's degree	_____
		Ph.D.	_____
		Other	_____

Have you taken an investments course or seminar on the stock market since 1964? Yes _____ No _____

Does your company have:

An investor relations Program?	Yes _____ No _____
An Individual Responsible for Investor Relations?	Yes _____ No _____
A stock option plan for executives?	Yes _____ No _____
An employee (other than executives) stock purchase plan?	Yes _____ No _____

Who (what position - president, vice-president, etc.) authorizes the final release of investor information? Position _____

If any of the following types of financial specialists are on your Board of Directors, please indicate how many.

	Number
Stock Broker/Dealer	_____
Investment Banker	_____
Commercial Banker	_____
Insurance Executive	_____
Financial Analyst/Writer	_____
Other (Specify) _____	_____

Approximately how many institutions held stock in your company before your stock became listed? Number _____

Approximately how many institutions now hold stock in your company? Number _____

How frequently does your company do the following:	Never	Quarterly	Semi-Annually	Annually	Other (Specify)
Send balance sheet information to common stockholders	_____	_____	_____	_____	_____
Send income statement information to common stockholders	_____	_____	_____	_____	_____
Send balance sheet information to the financial press or wire services	_____	_____	_____	_____	_____
Send income statement information to the financial press or wire services	_____	_____	_____	_____	_____
Solicit proxies from common stockholders	_____	_____	_____	_____	_____
Send other types of information to company stockholders	_____	_____	_____	_____	_____

What is the approximate number of contacts per month on company business between yourself and financial analysts or brokers (and by whom initiated)?

	Initiated by	
Type of Contact	Yourself	Analysts or Brokers
Personal	_____	_____
Telephone	_____	_____
Written	_____	_____

Does your company plan on selling additional common stock within the next three years?

Yes _____ No _____ No Comment _____ Undecided _____

Listed (cont'd.)

- II. PLEASE ESTIMATE WHAT YOU BELIEVED THE EFFECTS WOULD BE ON THE FACTORS CITED BELOW. USE THE PERSPECTIVE HELD IMMEDIATELY PRIOR TO THE RECENT LISTING OF YOUR COMMON STOCK. PLEASE RATE THE FACTORS FOR EACH EXCHANGE SHOWN FROM -3 THROUGH +3; WHERE -3 MEANS EXTREMELY UNFAVORABLE, -2 MODERATELY UNFAVORABLE, -1 SLIGHTLY UNFAVORABLE, 0 MEANS NO EFFECT WHEN LISTED, +1 SLIGHTLY FAVORABLE, +2 MODERATELY FAVORABLE, AND +3 EXTREMELY FAVORABLE.

Factors	New York Stock Exchange					American Stock Exchange					Midwest Stock Exchange				
	For Your Company If It Were To Be Listed On:														
	Unfavorable	-2	-1	Neutral	Favorable	Unfavorable	-2	-1	Neutral	Favorable	Unfavorable	-2	-1	Neutral	Favorable
Ownership Base: (Number of shareholders)															
Marketability of Stock (Salesability)															
Management Control															
Loss of Sales Support by Over-the-Counter Market-Making Dealers															
Sales of Additional Stock															
Transactions (Volume of Sales)															
Company's Credit Rating															
Access to Money and Capital Markets															
Price Volatility of Stock (fluctuations)															
Offers an "Advertising Value"															
Analysis of Stock and Company by potential investors															
Prestige for your Company															
Emphasis on Short-Run Operations															
Requirements for Reporting to: Stockholders															
Public Exchanges															
Merger (Your company's ability to acquire other firms)															
Merger (The attractiveness of your firm, if listed, to other firms)															
Loan Value of Stock for Shareholders															
Newspaper Publicity on Prices															
Newspaper Publicity on Volume															
Current Stockholder Interest															
Affect on Price per Share															
Spread Between "Bid" and "Ask"															

- III. THE FOLLOWING STATEMENTS RELATE TO CURRENT EXPENSES ASSOCIATED WITH LISTING. FOR EACH OF THE EXCHANGES SHOWN, PLEASE INDICATE WHETHER THE FOLLOWING STATEMENTS WOULD HAVE BEEN CONSIDERED (AT THE TIME OF YOUR LISTING) A SIGNIFICANT VARIABLE IN THE PROCESS OF DECIDING WHETHER TO LIST OR REFRAIN FROM LISTING. (PLEASE CIRCLE EITHER YES OR NO.) TO ASSIST YOU IN RESPONDING TO CERTAIN QUESTIONS, THE TABLE BELOW CONTAINS FOUR EXCHANGES AND THE FEES THAT THEY WOULD CHARGE IF TWO MILLION SHARES WERE TO BE LISTED.

Fee Type	New York	American	Midwest	Pacific Coast
Initial Listing Fee	35,000	12,500	2,500	2,500
Annual Maintenance Fee	5,000	2,000	250	250

	New York		American		Midwest		Pacific Coast	
Other things being equal, the fees shown above preclude your listing your stock.	Yes	No	Yes	No	Yes	No	Yes	No
The above fees are considered an important portion of the total listing decision-making process.	Yes	No	Yes	No	Yes	No	Yes	No
The requirements of maintaining Transfer Agent and Registrar offices in a location other than (or in addition to) your company's offices.	Yes	No	Yes	No	Yes	No	Yes	No
Expenses associated with the exchanges reporting requirements to themselves and to stockholders.	Yes	No	Yes	No	Yes	No	Yes	No
The <u>total</u> expenses associated with listing preclude your listing your stock.	Yes	No	Yes	No	Yes	No	Yes	No
If you were to be listed on the New York or the American, would the fees shown in the table above deter you from having your stock also listed on a Regional exchange (known as a "dual" listing).	Yes	No	Yes	No	Yes	No	Yes	No

Listed (cont'd.)

IV. PLEASE INDICATE YOUR BELIEFS AND OPINIONS BY CHECKING OR FILLING IN THE ANSWERS TO THE FOLLOWING QUESTIONS.

Public records indicate that your common stock was listed on the following exchange(s) on the dates written below. If these dates are correct, please check here. _____ If these dates are incorrect or are not shown, please insert the correct date.

	<u>Date Listed</u>		<u>Date Listed</u>		<u>Prior to:</u>
New York	_____	Cincinnati	_____	OVER-THE-COUNTER	_____
American	_____	Detroit	_____		
National	_____	Phil-Balt-Wash	_____		
Midwest	_____	Pittsburgh	_____		
Pacific Coast	_____	Salt Lake	_____		
Boston	_____	Spokane	_____		
		Other	_____		

Please indicate the weight that you believe was assigned to the opinion of the following groups or individuals if you discussed with them the possibility of listing your company's stock. (Please indicate weight from 0 to 10 with 10 indicating the greatest weight.)

	<u>Weight</u>
Company Officers	_____
Board of Directors	_____
Over-the-Counter Market-Making Dealer(s)	_____
Stock Exchange Representative(s)	_____
Investment Bankers	_____
Stockholders	_____
Legal Counsel	_____
Institutional Investors	_____
Your own opinion	_____
Others (Please specify) _____	_____

At the time of listing if it were known that it were possible to voluntarily delist your common stock after a year's trial run on an exchange would this have been considered a significant factor in your listing decision?

Yes _____ No _____

Prior to listing did you discuss with any of the Over-the-Counter Dealers who "made a market" in your stock the possibility of listing your company's stock on an exchange?

Yes _____ No _____

If yes, the over-the-counter dealer's attitude toward the listing of your stock was:

Substantially Against	Neutral	Substantially Favorable
-3 -2 -1	0	+1 +2 +3

What were the essential reasons supporting their attitude? _____

Prior to your recent listing there were contacts between your company and at least one exchange; if there were contacts with other exchanges, please indicate them also. Please specify the type of contact and whether it was exchange or company initiated.

<u>Type of Contact</u>	<u>Initiated by</u>				
	Your Company	New York	American	Midwest	Other (none)
Personal	_____	_____	_____	_____	_____
Telephone	_____	_____	_____	_____	_____
Written	_____	_____	_____	_____	_____

Does your company plan on eventually listing its stock on the:

	Yes	No	No Comment	Not Applicable
New York Stock Exchange	_____	_____	_____	_____
American Stock Exchange	_____	_____	_____	_____

If your company is or were to be listed on the American, the New York, or the National Stock Exchange, would you consider also a "dual listing", that is, listing on a Regional Exchange?

Yes _____ No _____

If yes, on which Regional Exchange(s)?

Boston	_____	Phil-Balt-Wash	_____
Cincinnati	_____	Pittsburgh	_____
Detroit	_____	Salt Lake	_____
Midwest	_____	Spokane	_____
Pacific Coast	_____	Other	_____

For which exchange(s) did your company request listing within three years before becoming listed?

New York	_____	Pacific Coast	_____
American	_____	Other Regional Exchanges	_____
National	_____	(Please specify)	_____
Midwest	_____		_____

Do you wish to be quoted or remain anonymous?

Anonymous _____ Quoted _____

V. OPEN-END QUESTIONS THAT MAY SUGGEST TO YOU CERTAIN OPINIONS, OBSERVATIONS AND EXPERIENCES ABOUT WHICH YOU MAY WISH TO ELABORATE. PLEASE FEEL FREE TO USE THE BLANK FOURTH PAGE FOR YOUR (HANDWRITTEN, IF WISH) ANSWER.

Why did your company follow the path it has from the time of going public to its present listed status. (For example, why did your company proceed directly from the Over-the-Counter market to the New York? Or, why did your company list on the American and then proceed to list on the New York? Or, why did your company list its stock?)

How should a company market or have marketed its common stock? (What types of approaches and services would you recommend to develop knowledge of and acceptance of your company's stock in the marketplace?)

APPENDIX B

Table B-1

SURVEY COUNTS: AMERICAN COMPANY GROUP

Category	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Questionnaires sent	222	100	214	100
Total returns received	120	54	103	48
Refusals	19	9	11	5
Questionnaires answered	101	45	92	43
Answered open-end part only	6	3	1	0
Utilized in statistical analysis	95	43	91	43

Table B-2

SURVEY COUNTS: NEW YORK COMPANY GROUP

Category	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Questionnaires sent	56	100	106	100
Total returns received	31	55	57	54
Refusals	2	4	9	8
Questionnaires answered	29	52	48	45
Answered open-end part only	3	5	1	1
Utilized in statistical analysis	26	46	47	44

Table B-3

GEOGRAPHIC DISTRIBUTION OF RESPONDENTS:
AMERICAN COMPANY GROUP

State	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies
	Number	Number
Alabama	0	0
Alaska	1	0
Arizona	0	2
Arkansas	0	0
California	3	19
Colorado	0	2
Connecticut	2	2
Delaware	0	1
Florida	1	4
Georgia	1	2
Hawaii	1	0
Idaho	2	0
Illinois	7	4
Indiana	3	2
Iowa	1	1
Kansas	1	1
Kentucky	1	0
Louisiana	1	0
Maine	0	0
Maryland	1	0
Massachusetts	4	5
Michigan	4	1
Minnesota	11	1
Mississippi	0	0
Missouri	5	1
Montana	1	0
Nebraska	2	2
Nevada	0	0
New Hampshire	0	1
New Jersey	1	3
New Mexico	0	0
New York	6	14
North Carolina	2	1
North Dakota	0	1
Ohio	12	1
Oklahoma	0	2
Oregon	1	0
Pennsylvania	2	5
Rhode Island	0	0
South Carolina	0	0
South Dakota	0	0
Tennessee	1	2

Table B-3 (cont'd.)

State	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies
	Number	Number
Texas	10	7
Utah	2	0
Vermont	0	0
Virginia	2	0
Washington	0	1
West Virginia	0	1
Wisconsin	3	1
Wyoming	0	0
Washington, D.C.	0	0
Foreign	0	1
	<u>95</u>	<u>91</u>

Table B-4

GEOGRAPHIC DISTRIBUTION OF RESPONDENTS:
NEW YORK COMPANY GROUP

State	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies
	Number	Number
Alabama	0	0
Alaska	0	0
Arizona	0	1
Arkansas	0	0
California	3	10
Colorado	0	0
Connecticut	0	0
Delaware	0	0
Florida	0	0
Georgia	1	0
Hawaii	0	0
Idaho	0	1
Illinois	0	3
Indiana	0	1
Iowa	1	1
Kansas	0	1
Kentucky	0	0
Louisiana	0	0
Maine	0	0
Maryland	0	0
Massachusetts	0	1
Michigan	3	2
Minnesota	1	1
Mississippi	0	0
Missouri	3	1
Montana	0	0
Nebraska	0	0
Nevada	0	0
New Hampshire	0	0
New Jersey	0	0
New Mexico	0	0
New York	3	7
North Carolina	0	0
North Dakota	0	0
Ohio	3	3
Oklahoma	0	1
Oregon	0	0
Pennsylvania	0	4
Rhode Island	0	0
South Carolina	0	0
South Dakota	0	0
Tennessee	0	2

Table B-4 (cont'd.)

State	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies
	Number	Number
Texas	1	5
Utah	0	0
Vermont	0	0
Virginia	0	0
Washington	2	1
West Virginia	0	0
Wisconsin	4	1
Wyoming	0	0
Washington, D.C.	1	0
Foreign	0	0
	<u>26</u>	<u>47</u>

Table B-5

**RESPONDENTS' INDUSTRIAL CLASSIFICATION:
AMERICAN COMPANY GROUP**

Industrial Division	Eligible		1969 and 1970	
	Over-the-Counter		Listed Companies	
	Number	Percent	Number	Percent
Agriculture, Forestry, Fisheries	0	0	1	1
Mining	4	4	7	8
Contract Construction	2	2	4	4
Manufacturing	66	69	43	47
Transportation, Communication, Electric, Gas and Sanitary Services	0	0	1	1
Wholesale and Retail Trade	17	18	15	16
Finance, Insurance and Real Estate	0	0	0	0
Services	6	6	20	22
Government	0	0	0	0
Nonclassifiable Establishments	0	0	0	0
	<u>95</u>	<u>99^a</u>	<u>91</u>	<u>99^a</u>

^a Numbers do not add to 100 because of rounding.

Table B-6

RESPONDENTS' INDUSTRIAL CLASSIFICATION:
NEW YORK COMPANY GROUP

Industrial Division	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Agriculture, Forestry, Fisheries	0	0	0	0
Mining	0	0	2	4
Contract Construction	0	0	2	4
Manufacturing	20	77	30	64
Transportation, Communication, Electric, Gas and Sanitary Services	0	0	0	0
Wholesale and Retail Trade	6	23	4	9
Finance, Insurance and Real Estate	0	0	1	2
Services	0	0	8	17
Government	0	0	0	0
Nonclassifiable Establishments	0	0	0	0
	<u>26</u>	<u>100</u>	<u>47</u>	<u>100</u>

Table B-7

RESPONDENTS' TITLES:
AMERICAN COMPANY GROUP

Title	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Chairman	11	12	10	11
President	50	53	50	55
Vice-President	18	19	19	21
Treasurer	9	9	6	6
Company Secretary	1	1	3	3
Administrative Assistant	3	3	0	0
Public Relations Directors	0	0	1	1
Miscellaneous	0	0	0	0
No Title Checked	3	3	2	2
Total	95	100	91	99 ^a

^aNumbers do not add to 100 because of rounding.

Table B-8

RESPONDENTS' TITLES:
NEW YORK COMPANY GROUP

Title	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Chairman	3	12	4	9
President	10	38	22	47
Vice-President	6	23	14	30
Treasurer	5	19	3	6
Company Secretary	0	0	0	0
Administrative Assistant	1	4	2	4
Public Relations Directors	0	0	1	2
Miscellaneous	0	0	1	2
No Title Checked	1	4	0	0
Total	26	100	47	100

Table B-9

RESPONDENTS' AGES:
AMERICAN COMPANY GROUP

Age Bracket	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
26-35	8	8	13	14
36-45	22	23	19	21
46-55	39	41	42	46
56-65	23	24	13	14
65 and over	2	2	2	2
No age checked	1	1	2	2
Total	95	99 ^a	91	99 ^a

^aNumbers do not add to 100 because of rounding.

Table B-10

RESPONDENTS' AGES:
NEW YORK COMPANY GROUP

Age Bracket	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
26-35	1	4	6	13
36-45	6	23	14	30
46-55	10	38	22	47
56-65	9	35	5	11
65 and over	0	0	0	0
No age checked	0	0	0	0
Total	26	100	47	101 ^a

^aNumbers do not add to 100 because of rounding.

Table B-11

RESPONDENTS' LEVEL OF EDUCATION:
AMERICAN COMPANY GROUP

Educational Level	Eligible		1969 and 1970	
	Over-the-Counter		Listed Companies	
	Number	Percent	Number	Percent
High School	2	2	2	2
Some College	15	16	13	14
Bachelor's Degree	32	34	25	27
Some Advanced Work	17	18	26	29
Master's Degree	19	20	16	18
Ph.D. Degree	2	2	1	1
Law Degree	6	6	5	5
C.P.A. Certificate	1	1	3	3
No Answer Given	1	1	0	0
Total	95	100	91	99 ^a

^aNumbers do not add to 100 because of rounding.

Table B-12

RESPONDENTS' LEVEL OF EDUCATION:
NEW YORK COMPANY GROUP

Educational Level	Eligible		1969 and 1970	
	Over-the-Counter		Listed Companies	
	Number	Percent	Number	Percent
High School	1	4	2	4
Some College	1	4	4	9
Bachelor's Degree	11	42	13	28
Some Advanced Work	1	4	11	23
Master's Degree	9	35	13	28
Ph.D. Degree	0	0	0	0
Law Degree	2	8	1	2
C.P.A. Certificate	0	0	2	4
No Answer Given	1	4	1	2
Total	26	101	47	100

Table B-13

RESPONDENTS' PARTICIPATION IN INVESTMENT
COURSES OR SEMINARS:
AMERICAN COMPANY GROUP

Question	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Have you taken an Investment Course or Seminar?				
Yes	16	17	17	19
No	74	78	71	78
No answer given	<u>5</u>	<u>5</u>	<u>3</u>	<u>3</u>
Total	95	100	91	100

Table B-14

RESPONDENTS' PARTICIPATION IN INVESTMENT
COURSES OR SEMINARS:
NEW YORK COMPANY GROUP

Question	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Have you taken an Investment Course or Seminar?				
Yes	3	12	13	28
No	20	77	32	68
No answer given	<u>3</u>	<u>12</u>	<u>2</u>	<u>4</u>
Total	26	101 ^a	47	100

^aNumbers do not add to 100 because of rounding.

Table B-15

FINANCIAL AND HISTORICAL DATA:
AMERICAN COMPANY GROUP
(Arithmetic Averages)

Financial and Historical Data	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies
Net Tangible Assets ^a	\$16,028	\$ 9,875
Net Income ^a	\$ 1,934	\$ 1,644
Pre-tax Income ^a	\$ 3,673	\$ 3,017
Market Price		
High	\$35.47	\$26.73
Low	\$19.57	\$12.95
Market Value of Publicly Held Shares ^a	\$16,000	\$11,714
<u>Stockholder Data</u>		
Shares Outstanding ^a	1,359	1,935
Shares Publicly Held ^a	843	938
Number of Stockholders	2,395	1,882
<u>Historical Data</u>		
Company Age	44.7	19.4

^a Numbers in thousands.

Table B-16

**FINANCIAL AND HISTORICAL DATA:
NEW YORK COMPANY GROUP
(Arithmetic Averages)**

Financial and Historical Data	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies
Net Tangible Assets ^a	\$52,434	\$37,399
Net Income ^a	\$ 7,038	\$ 7,265
Pre-tax Income ^a	\$13,794	\$11,822
Market Price		
High	\$58.75	\$42.30
Low	\$35.88	\$21.68
Market Value of Publicly Held Shares ^a	\$57,744	\$81,651
<u>Stockholder Data</u>		
Shares Outstanding ^a	2,766	4,298
Shares Publicly Held ^a	1,823	2,999
Number of Shareholders	3,873	4,762
<u>Historical Data</u>		
Company Age	55.9	34.6

^aNumbers in thousands.

Table B-17

AUTHORIZES RELEASES OF INVESTOR INFORMATION:
AMERICAN COMPANY GROUP

Position	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Chairman	6	6	6	7
President	60	63	58	64
Vice-President	19	20	17	19
Treasurer	2	2	3	3
Secretary	1	1	1	1
Public Relations Director	0	0	1	1
Other Positions	0	0	1	1
No Answer Given	7	7	4	4
Totals	95	99 ^a	91	100

^aNumbers do not add to 100 because of rounding.

Table B-18

AUTHORIZES RELEASES OF INVESTOR INFORMATION:
NEW YORK COMPANY GROUP

Position	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Chairman	0	0	5	11
President	18	69	25	53
Vice-President	4	15	13	28
Treasurer	2	8	1	2
Secretary	0	0	0	0
Public Relations Director	0	0	0	0
Other Positions	0	0	2	4
No Answer Given	2	8	1	2
Totals	26	100	47	100

Table B-19

**INVESTOR RELATIONS AND EMPLOYEE STOCK PLANS:
AMERICAN COMPANY GROUP**

Question	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Investor Relations Program				
Yes	44	46	45	49
No	38	40	37	41
No answer given	<u>13</u>	<u>14</u>	<u>9</u>	<u>10</u>
Totals	95	100	91	100
Individual Responsible for Investor Relations				
Yes	76	80	76	84
No	13	14	11	12
No answer given	<u>6</u>	<u>6</u>	<u>4</u>	<u>4</u>
Totals	95	100	91	100
Stock Option Plan for Executives				
Yes	72	76	82	90
No	18	19	6	7
No answer given	<u>5</u>	<u>5</u>	<u>3</u>	<u>3</u>
Totals	95	100	91	100
Employee (other than executive) Stock Purchase Plan				
Yes	38	40	28	31
No	53	56	57	63
No answer given	<u>4</u>	<u>4</u>	<u>6</u>	<u>7</u>
Totals	95	100	91	101 ^a

^aNumbers do not add to 100 because of rounding.

Table B-20

INVESTOR RELATIONS AND EMPLOYEE STOCK PLANS:
NEW YORK COMPANY GROUP

Question	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Investor Relations Program				
Yes	10	38	31	66
No	12	46	15	32
No answer given	<u>4</u>	<u>15</u>	<u>1</u>	<u>2</u>
Totals	26	99 ^a	47	100
Individual Responsible for Investor Relations				
Yes	16	62	42	89
No	7	27	4	9
No answer given	<u>3</u>	<u>12</u>	<u>1</u>	<u>2</u>
Totals	26	101 ^a	47	100
Stock Option Plan for Executives				
Yes	18	69	42	89
No	6	23	2	4
No answer given	<u>2</u>	<u>8</u>	<u>3</u>	<u>6</u>
Totals	26	100	47	99 ^a
Employee (other than executive) Stock Purchase Plan				
Yes	11	42	29	62
No	14	54	16	34
No answer given	<u>1</u>	<u>4</u>	<u>2</u>	<u>4</u>
Totals	26	100	47	100

^aNumbers do not add to 100 because of rounding.

Table B-21

**FINANCIAL SPECIALISTS ON THE BOARD OF DIRECTORS:
AMERICAN COMPANY GROUP**

Financial Specialists on the Board of Directors	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Average per Company	Number	Average per Company
Broker/Dealers	13	.14	16	.18
Investment Bankers	27	.28	52	.15
Commercial Bankers	41	.43	37	.41
Insurance Executives	11	.12	9	.10
Financial Writers	4	.04	9	.10
Other Professions				
Lawyers	2	.02	12	.13
Accountants	1	.01	3	.03
Professors	1	.01	0	.00
Others	7	.08	6	.07
Sub Totals	11	.12	21	.23
Totals	107	1.13	144	1.58

Table B-22

FINANCIAL SPECIALISTS ON THE BOARD OF DIRECTORS:
NEW YORK COMPANY GROUP

Financial Specialists on the Board of Directors	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Average per Company	Number	Average per Company
Broker/Dealers	3	.12	4	.09
Investment Bankers	8	.31	22	.47
Commercial Bankers	11	.42	23	.49
Insurance Executives	3	.12	2	.05
Financial Writers	1	.04	4	.09
Other Professions				
Lawyers	0	.00	2	.05
Accountants	0	.00	0	.00
Professors	0	.00	0	.00
Others	1	.04	17	.36
Sub Totals	1	.04	19	.41
Totals	27	1.04	74	1.57

Table B-23

OVER-THE-COUNTER MARKET MAKING DEALERS:
AMERICAN COMPANY GROUP

Number of Dealers	Eligible Over-the-Counter Companies	
	Number	Percent
1-5	36	38
6-10	41	43
11-15	14	16
16-20	4	4
21-25	0	0
26-30	<u>0</u>	<u>0</u>
Total	95	100
Arithmetic Mean	7.4	
Range	2-19	

Table B-24

OVER-THE-COUNTER MARKET MAKING DEALERS:
NEW YORK COMPANY GROUP

Number of Dealers	Eligible Over-the-Counter Companies	
	Number	Percent
1-5	7	27
6-10	14	54
11-15	1	4
16-20	2	8
21-25	1	4
26-30	<u>1</u>	<u>4</u>
Total	26	101 ^a
Arithmetic Mean	9.6	
Range	2-30	

^aNumbers do not add to 100 because of rounding.

Table B-25

INSTITUTIONAL HOLDERS OF COMPANY STOCK
BEFORE AND AFTER LISTING:
AMERICAN COMPANY GROUP

Number of Holders	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Before	After ^a	Before	After
0	9		38	9
1-5	36		24	27
6-10	17		3	17
11-15	9		2	2
16-20	3		1	5
21-25	2		1	2
26-30	1		0	0
31-35	2		0	0
36-100	4		0	6
No answer given/do not know	<u>12</u>		<u>22</u>	<u>23</u>
Totals	95		91	91
Arithmetic Mean	9.4		2.1	11.6
Range	0-100		0-25	0-100

^aNot applicable as companies are not listed.

Table B-26

INSTITUTIONAL HOLDERS OF COMPANY STOCK
BEFORE AND AFTER LISTING:

NEW YORK COMPANY GROUP

Number of Holders	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Before	After ^a	Before	After
0	2		13	1
1-5	7		11	5
6-10	2		2	12
11-15	0		2	5
16-20	2		0	2
21-25	0		0	3
26-30	2		2	2
31-35	0		1	1
36-100	4		0	7
No answer given/do not know	<u>7</u>		<u>16</u>	<u>9</u>
Totals	26		47	47
Arithmetic Mean	17.5		5.5	27.6
Range	0-50		0-35	0-84

^aNot applicable as companies are not listed.

Table B-27

FREQUENCY AND DISTRIBUTION OF FINANCIAL INFORMATION:
AMERICAN COMPANY GROUP

Question	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Send balance sheet information to common stockholders				
Never	0	0	0	0
Quarterly	27	28	18	20
Semi-annually	3	3	2	2
Annually	65	68	69	76
Other times	0	0	0	0
No answer given	<u>0</u>	<u>0</u>	<u>2</u>	<u>2</u>
Totals	95	99 ^a	91	100
Send income statement information to common stockholders				
Never	0	0	0	0
Quarterly	86	90	84	92
Semi-annually	6	6	4	4
Annually	3	3	3	3
Other times	0	0	0	0
No answer given	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Totals	95	99 ^a	91	99 ^a
Send balance sheet information to the financial press or wire service				
Never	4	4	17	19
Quarterly	31	33	20	22
Semi-annually	3	3	0	0
Annually	55	58	50	55
Other times	1	1	0	0
No answer given	<u>1</u>	<u>1</u>	<u>4</u>	<u>4</u>
Totals	95	100	91	100

Table B-27 (cont'd.)

Question	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Send income statement information to the financial press or wire service				
Never	0	0	0	0
Quarterly	86	90	86	95
Semi-annually	3	3	2	2
Annually	5	5	2	2
Other times	0	0	0	0
No answer given	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
Totals	95	99 ^a	91	100
Solicit proxies from stockholders				
Never	1	1	0	0
Quarterly	2	2	0	0
Semi-annually	0	0	0	0
Annually	91	96	91	100
Other times	0	0	0	0
No answer given	<u>1</u>	<u>1</u>	<u>0</u>	<u>0</u>
Totals	95	100	91	100
Send other types of information to company stockholders				
Never	7	7	11	12
Quarterly	32	34	27	30
Semi-annually	3	3	5	5
Annually	11	12	5	5
Other times	34	36	27	30
No answer given	<u>8</u>	<u>8</u>	<u>16</u>	<u>18</u>
Totals	95	100	91	100

^aNumbers do not add to 100 because of rounding.

Table B-28

FREQUENCY AND DISTRIBUTION OF FINANCIAL INFORMATION:
NEW YORK COMPANY GROUP

Question	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Send balance sheet information to common stockholders				
Never	0	0	0	0
Quarterly	7	27	10	21
Semi-annually	0	0	1	2
Annually	19	73	36	77
Other times	0	0	0	0
No answer given	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Totals	26	100	47	100
Send income statement information to common stockholders				
Never	0	0	0	0
Quarterly	25	96	45	96
Semi-annually	0	0	1	2
Annually	1	4	1	2
Other times	0	0	0	0
No answer given	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Totals	26	100	47	100
Send balance sheet information to the financial press or wire service				
Never	1	4	8	17
Quarterly	9	35	8	17
Semi-annually	0	0	1	2
Annually	16	62	30	64
Other times	0	0	0	0
No answer given	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Totals	26	101 ^a	47	100

Table B-28 (cont'd.)

Question	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Send income statement information to the financial press or wire service				
Never	0	0	0	0
Quarterly	25	96	44	94
Semi-annually	0	0	1	2
Annually	1	4	1	2
Other times	0	0	0	0
No answer given	<u>0</u>	<u>0</u>	<u>1</u>	<u>2</u>
Totals	26	100	47	100
Solicit proxies from stockholders				
Never	0	0	0	0
Quarterly	0	0	1	2
Semi-annually	0	0	0	0
Annually	25	96	45	96
Other times	0	0	1	2
No answer given	<u>1</u>	<u>4</u>	<u>0</u>	<u>0</u>
Totals	26	100	47	100
Send other types of information to company stockholders				
Never	3	12	3	6
Quarterly	9	35	17	36
Semi-annually	0	0	1	2
Annually	0	0	3	6
Other times	7	27	17	36
No answer given	<u>7</u>	<u>27</u>	<u>6</u>	<u>13</u>
Totals	26	101 ^a	47	99 ^a

^aNumbers do not add to 100 because of rounding.

Table B-29

PERSONAL CONTACTS INITIATED BY COMPANIES:
AMERICAN COMPANY GROUP

Item	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies
Number of Companies	95	91
Percent of Companies Initiating Contact	39	33
Average Number of Contacts Made by Companies which Initiated Contact	2.3	2.7
Range of Number of Contacts	0-10	0-30

Table B-30

PERSONAL CONTACTS INITIATED BY COMPANIES:
NEW YORK COMPANY GROUP

Item	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies
Number of Companies	26	47
Percent of Companies Initiating Contact	14	13
Average Number of Contacts Made by Companies which Initiated Contact	2.5	2.6
Range of Number of Contacts	0-5	1-5

Table B-31

TELEPHONE CONTACTS INITIATED BY COMPANIES:
AMERICAN COMPANY GROUP

Item	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies
Number of Companies	95	91
Percent of Companies Initiating Contact	40	33
Average Number of Contacts Made by Companies which Initiated Contact	4.3	6.9
Range of Number of Contacts	0-50	0-60

Table B-32

TELEPHONE CONTACTS INITIATED BY COMPANIES:
NEW YORK COMPANY GROUP

Item	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies
Number of Companies	26	47
Percent of Companies Initiating Contact	27	26
Average Number of Contacts Made by Companies which Initiated Contact	5.8	7.0
Range of Number of Contacts	0-10	2-30

Table B-33

**WRITTEN CONTACTS INITIATED BY COMPANIES:
AMERICAN COMPANY GROUP**

Item	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies
Number of Companies	95	91
Percent of Companies Initiating Contact	20	21
Average Number of Contacts Made by Companies Which Initiated Contact	1.6	1.4
Range of Number of Contacts	0-10	0-6

Table B-34

**WRITTEN CONTACTS INITIATED BY COMPANIES:
NEW YORK COMPANY GROUP**

Item	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies
Number of Companies	26	47
Percent of Companies Initiating Contact	15	13
Average Number of Contacts Made by Companies Which Initiated Contact	4.7	2.3
Range of Number of Contacts	0-10	1-4

Table B-35

PERSONAL CONTACTS INITIATED BY ANALYSTS:
AMERICAN COMPANY GROUP

Item	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies
Number of Companies	95	91
Percent of Companies Receiving Contact	76	68
Average Number of Contacts Made to Companies Which were Contacted	2.5	3.4
Range of Number of Contacts	0-18	0-15

Table B-36

PERSONAL CONTACTS INITIATED BY ANALYSTS:
NEW YORK COMPANY GROUP

Item	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies
Number of Companies	26	47
Percent of Companies Receiving Contact	73	91
Average Number of Contacts Made to Companies Which were Contacted	4.8	4.5
Range of Number of Contacts	1-20	1-15

Table B-37

**TELEPHONE CONTACTS INITIATED BY ANALYSTS:
AMERICAN COMPANY GROUP**

Item	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies
Number of Companies	95	91
Percent of Companies Receiving Contact	87	88
Average Number of Contacts Made to Companies Which were Contacted	7.2	9.6
Range of Number of Contacts	1-50	0-40

Table B-38

**TELEPHONE CONTACTS INITIATED BY ANALYSTS:
NEW YORK COMPANY GROUP**

Item	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies
Number of Companies	26	47
Percent of Companies Receiving Contact	88	94
Average Number of Contacts Made to Companies Which were Contacted	12.4	15.0
Range of Number of Contacts	3-50	3-63

Table B-39

WRITTEN CONTACTS INITIATED BY ANALYSTS:
AMERICAN COMPANY GROUP

Item	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies
Number of Companies	95	91
Percent of Companies Receiving Contact	57	54
Average Number of Contacts Made to Companies Which were Contacted	4.9	6.9
Range of Number of Contacts	0-40	0-50

Table B-40

WRITTEN CONTACTS INITIATED BY ANALYSTS:
NEW YORK COMPANY GROUP

Item	Eligible Over-the-Counter Companies	1969 and 1970 Listed Companies
Number of Companies	26	47
Percent of Companies Receiving Contact	58	55
Average Number of Contacts Made to Companies Which were Contacted	9.8	6.5
Range of Number of Contacts	1-25	1-25

Table B-41

COMPANY (INTERNAL) DISCUSSIONS REGARDING LISTING:
AMERICAN COMPANY GROUP

Question	Eligible Over-the-Counter Companies	
	Number	Percent
Has there been (internal) discussion by officers?		
Yes	79	83
No	10	11
No comment	4	4
No answer given	2	2
Total	95	100

Table B-42

COMPANY (INTERNAL) DISCUSSIONS REGARDING LISTING:
NEW YORK COMPANY GROUP

Question	Eligible Over-the-Counter Companies	
	Number	Percent
Has there been (internal) discussion by officers?		
Yes	20	77
No	2	8
No comment	1	4
No answer given	3	12
Total	26	101 ^a

^aNumbers do not add to 100 because of rounding.

Table B-43

INTEREST IN A VOLUNTARY DELISTING OPTION:
AMERICAN COMPANY GROUP

Question	Eligible		1969 and 1970	
	Over-the-Counter		Listed Companies	
	Number	Percent	Number	Percent
Is a voluntary delisting option important?				
Yes	10	11	14	15
No	75	79	72	79
No answer given	<u>10</u>	<u>11</u>	<u>5</u>	<u>5</u>
Total	95	101 ^a	91	99 ^a

^aNumbers do not add to 100 because of rounding.

Table B-44

INTEREST IN A VOLUNTARY DELISTING OPTION:
NEW YORK COMPANY GROUP

Question	Eligible		1969 and 1970	
	Over-the-Counter		Listed Companies	
	Number	Percent	Number	Percent
Is a voluntary delisting option important?				
Yes	2	8	5	11
No	23	88	40	85
No answer given	<u>1</u>	<u>4</u>	<u>2</u>	<u>4</u>
Total	26	100	47	100

Table B-45

LISTING DISCUSSIONS WITH OVER-THE-COUNTER DEALERS:
AMERICAN COMPANY GROUP

Questions	Eligible Over-The-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Did you discuss with your over-the-counter dealers the possibility of listing your stock?				
Yes	53	56	48	53
No	31	33	35	38
No comment	10	10	0	0
No answer given	<u>1</u>	<u>1</u>	<u>8</u>	<u>9</u>
Total	95	100	91	100
If yes, the dealer's attitude was				
Extremely against listing	5	5	5	5
Moderately against listing	7	7	10	12
Slightly against listing	12	13	8	9
Neutral	12	13	10	12
Slightly favorable	7	7	5	5
Moderately favorable	4	4	5	5
Extremely favorable	5	5	5	5
No answer given	<u>43</u>	<u>45</u>	<u>43</u>	<u>47</u>
Total	95	99 ^a	91	100

^aNumbers do not add to 100 because of rounding.

Table B-46

LISTING DISCUSSIONS WITH OVER-THE-COUNTER DEALERS:
NEW YORK COMPANY GROUP

Questions	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Did you discuss with your over-the-counter dealers the possibility of listing your stock?				
Yes	16	62	22	47
No	8	31	21	45
No comment	2	8	0	0
No answer given	<u>0</u>	<u>0</u>	<u>4</u>	<u>9</u>
Total	26	101 ^a	47	101 ^a
If yes, the dealer's attitude was -				
Extremely against listing	4	15	3	6
Moderately against listing	2	8	3	6
Slightly against listing	3	12	5	11
Neutral	3	12	2	4
Slightly favorable	1	4	3	6
Moderately favorable	2	8	2	4
Extremely favorable	0	0	3	6
No answer given	<u>11</u>	<u>42</u>	<u>26</u>	<u>55</u>
Total	26	101 ^a	47	98 ^a

^aNumbers do not add to 100 because of rounding.

Table B-47

REASONS FOR OVER-THE-COUNTER DEALER ATTITUDES:
AMERICAN COMPANY GROUP

Reasons Given for OTC Dealer Attitudes	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
<u>OTC better:</u> more market makers; poor handling with only one special- ist; disadvantage since specialist cannot be chosen by firm	6	6	7	8
<u>Dealer Subjective reasons:</u>				
1. Non-monetary: no advantage to company; subjective dealer opinion; OTC dealer makes better decisions	5	5	5	5
2. Monetary: (-) loss of commission; (+) deal- ers exchange members; (+) dealers' value of holdings would increase	7	7	11	12
<u>Stock values would increase with listing</u>	1	1	0	0
<u>Listing advantages:</u> marketability; stability; creates more active market; attracts large investors (institutions)	8	8	6	7
<u>NASDAQ System:</u> changes and effects of NASDAQ still unknown	4	4	0	0
<u>Loss of Company Identity:</u> may be lost among listed companies; float too small	1	1	1	1

Table B-47 (cont'd.)

Reasons Given for OTC Dealer Attitudes	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
<u>Miscellaneous</u>	4	4	2	2
<u>No Answer Given</u>	<u>59</u>	<u>62</u>	<u>59</u>	<u>65</u>
Totals	95	98 ^a	91	100

^a Numbers do not add to 100 because of rounding.

Table B-48

REASONS FOR OVER-THE-COUNTER DEALER ATTITUDES:
NEW YORK COMPANY GROUP

Reasons Given for OTC Dealer Attitudes	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
<u>OTC better:</u> more market makers; poor handling with only one special- ist; disadvantage since specialist cannot be chosen by firm	1	4	2	4
<u>Dealer subjective reasons:</u>				
1. Non-monetary: no advantage to company; subjective dealer opinion; OTC dealer makes better decisions	3	12	4	9
2. Monetary: (-) loss of commission; (+) deal- ers exchange members; (+) dealers' value of holdings would increase	1	4	5	11
<u>Stock values</u> would increase with listing	0	0	0	0
<u>Listing Advantages:</u>				
marketability; stability; creates more active market; attracts large investors (institutions)	1	4	4	9
<u>NASDAQ System:</u> changes and effects of NASDAQ still unknown	3	12	0	0
<u>Loss of Company Identity:</u>				
may be lost among listed companies; float too small	0	0	0	0

Table B-48 (cont'd.)

Reasons Given for OTC Dealer Attitudes	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
<u>Miscellaneous</u>	0	0	0	0
<u>No Answer Given</u>	<u>17</u>	<u>65</u>	<u>32</u>	<u>68</u>
Totals	26	101 ^a	47	101 ^a

^a Numbers do not add to 100 because of rounding.

Table B-49

COMMUNICATION WITH EXCHANGES REGARDING LISTING:
AMERICAN COMPANY GROUP

Question	Eligible Over-the-Counter Companies	
	Number	Percent
Have you communicated with exchanges? (listed only)		
Yes	53	56
No	37	39
No answer given	<u>5</u>	<u>5</u>
Total	95	100

Table B-50

COMMUNICATION WITH EXCHANGES REGARDING LISTING:
NEW YORK COMPANY GROUP

Question	Eligible Over-the-Counter Companies	
	Number	Percent
Have you communicated with exchanges? (listed only)		
Yes	16	62
No	9	35
No answer given	<u>1</u>	<u>4</u>
Total	26	101 ^a

^aNumbers do not add to 100 because of rounding.

Table B-51

FREQUENCY AND TYPES OF CONTACT WITH EXCHANGES:
AMERICAN COMPANY GROUP

Initiated by	Contact Type of	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
		Number	Percent	Number	Percent
Your Company	Personal	19	20	23	25
	Telephone	13	14	19	21
	Written	13	14	25	27
American Exchange	Personal	23	24	18	20
	Telephone	12	13	13	14
	Written	21	22	21	23
New York Exchange	Personal	21	22	2	2
	Telephone	4	4	3	3
	Written	12	13	3	3
Midwest Exchange	Personal	4	4	0	0
	Telephone	2	2	1	1
	Written	10	11	2	2
Other	Personal	2	2	5	5
	Telephone	0	0	3	3
	Written	1	1	4	4

Table B-52

FREQUENCY AND TYPES OF CONTACT WITH EXCHANGES:
NEW YORK COMPANY GROUP

Initiated by	Contact Type of	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
		Number	Percent	Number	Percent
Your Company	Personal	6	23	20	43
	Telephone	2	8	12	26
	Written	3	12	18	38
American Exchange	Personal	3	12	5	11
	Telephone	3	12	4	9
	Written	5	19	5	11
New York Exchange	Personal	9	35	7	15
	Telephone	6	23	6	13
	Written	6	23	5	11
Midwest Exchange	Personal	0	0	1	2
	Telephone	0	0	1	2
	Written	5	19	0	0
Other	Personal	1	4	3	6
	Telephone	1	4	3	6
	Written	1	4	4	9

Table B-53

LISTING INTENTIONS OF UNLISTED COMPANIES:
AMERICAN COMPANY GROUP

Questions	Eligible Over-the-Counter Companies	
	Number	Percent
Does your company plan on eventually listing its stock on an exchange?		
Yes	40	42
No	4	4
Undecided	35	37
No comment	13	14
Answer not given	<u>3</u>	<u>3</u>
Total	95	100
If yes, on which exchange?		
American	10 ^a	11
New York	<u>43</u>	<u>45</u>
Total	53	56

^aOf the ten companies which indicated they would list on the American Exchange, six also stated they would (later) list on the New York.

Table B-54

LISTING INTENTIONS OF UNLISTED COMPANIES:
NEW YORK COMPANY GROUP

Questions	Eligible Over-the-Counter Companies	
	Number	Percent
Does your company plan on eventually listing its stock on an exchange?		
Yes	10	38
No	3	12
Undecided	9	35
No comment	4	15
Answer not given	<u>0</u>	<u>0</u>
Total	26	100
If yes, on which exchange?		
American	0	0
New York	<u>13</u>	<u>50</u>
Total	13	50

Table B-55

LISTING INTENTIONS OF LISTED COMPANIES:
AMERICAN COMPANY GROUP

Question	1969 and 1970 Listed Companies	
	Number	Percent
Does your company plan to eventually list its stock on the:		
American Stock Exchange?		
Yes	0	0
No	0	0
No comment	0	0
Not applicable	91	100
Not answered	0	0
Total	91	100
New York Stock Exchange?		
Yes	34	37
No	3	3
No comment	19	21
Not applicable	0	0
Not answered	35	38
Total	91	99 ^a

^aNumbers do not add to 100 because of rounding.

Table B-56

LISTING INTENTIONS OF LISTED COMPANIES:
NEW YORK COMPANY GROUP

Question	1969 and 1970 Listed Companies	
	Number	Percent
Does your company plan to eventually list its stock on the:		
American Stock Exchange?		
Yes	0	0
No	0	0
No comment	0	0
Not applicable	47	100
Not answered	<u>0</u>	<u>0</u>
Total	47	100
New York Stock Exchange?		
Yes	0	0
No	0	0
No comment	0	0
Not applicable	47	100
Not answered	<u>0</u>	<u>0</u>
Total	47	100

Table B-57

**"DUAL" LISTING INTENTIONS:
AMERICAN COMPANY GROUP**

Questions	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
If your company <u>is or</u> <u>were to be listed,</u> would you also consider dual listing on a Regional Exchange?				
Yes	15	16	36	40
No	67	71	45	49
Undecided	4	4	2	2
No answer given	<u>9</u>	<u>9</u>	<u>8</u>	<u>9</u>
Total	95	100	91	100
If yes to dual listing, what Regionals would you consider?				
Boston	1	1	6	7
Cincinnati	2	2	0	0
Detroit	1	1	2	2
Midwest	10	11	5	5
Pacific Coast	5	5	19	21
Phil-Balt-Wash.	1	1	4	4
Pittsburgh	0	0	0	0
Salt Lake	1	1	0	0
Spokane	0	0	0	0
Other	0	0	2	2

Table B-58

**"DUAL" LISTING INTENTIONS:
NEW YORK COMPANY GROUP**

Questions	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
<u>If your company is or</u> <u>were to be listed,</u> <u>would you also consider</u> <u>dual listing on a</u> <u>Regional Exchange?</u>				
Yes	9	35	23	49
No	16	62	15	32
Undecided	0	0	1	2
No answer given	<u>1</u>	<u>4</u>	<u>8</u>	<u>17</u>
Total	26	101 ^a	47	100
 <u>If yes to dual listing,</u> <u>what Regional would</u> <u>you consider?</u>				
Boston	0	0	3	6
Cincinnati	1	4	0	0
Detroit	0	0	1	2
Midwest	5	19	8	17
Pacific Coast	2	8	19	40
Phil-Balt-Wash.	0	0	6	13
Pittsburgh	0	0	0	0
Salt Lake	0	0	0	0
Spokane	0	0	0	0
Other	0	0	0	0

^a Numbers do not add to 100 because of rounding.

Table B-59

LISTING REQUEST ACTIVITY:
AMERICAN COMPANY GROUP

Questions	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Has your company requested listing on an exchange within the past three years? ^b				
Yes	6	6		
No	85	89		
No comment	2	2		
No answer given	<u>2</u>	<u>2</u>		
Total	95	99 ^a		
For which exchanges has your company requested listing within the last three years?				
American	1	1	2	2
New York	6	6	33	36
National	- ^c	- ^c	0	0
Midwest	0	0	0	0
Pacific Coast	0	0	5	5
Other Regional	0	0	1	1

^aNumbers do not add to 100 because of rounding.

^bListed companies were not asked this question.

^cThis exchange inadvertently not included on unlisted company questionnaire.

Table B-60

LISTING REQUEST ACTIVITY:
NEW YORK COMPANY GROUP

Questions	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Has your company requested listing on an exchange within the past three years? ^b				
Yes	1	4		
No	22	85		
No comment	1	4		
No answer given	2	8		
Total	26	101 ^a		
For which exchanges has your company requested listing within the last three years?				
American	0	0	9	19
New York	1	4	15	32
National	- ^c	- ^c	0	0
Midwest	0	0	3	6
Pacific Coast	0	0	6	13
Other Regional	0	0	0	0

^aNumbers do not add to 100 because of rounding.

^bListed companies were not asked this question.

^cThis exchange inadvertently not included on unlisted company questionnaire.

Table B-61

PLANS FOR SELLING ADDITIONAL STOCK:
AMERICAN COMPANY GROUP

Question	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Do you intend to sell additional stock?				
Yes	16	17	23	25
No	26	27	21	23
No comment	22	23	19	20
Undecided	29	31	26	29
No answer given	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Total	95	100	91	99 ^a

^aNumbers do not add to 100 because of rounding.

Table B-62

PLANS FOR SELLING ADDITIONAL STOCK:
NEW YORK COMPANY GROUP

Question	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Do you intend to sell additional stock?				
Yes	3	12	6	13
No	16	62	22	47
No comment	3	12	8	17
Undecided	4	15	11	23
No answer given	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	26	101 ^a	47	100

^aNumbers do not add to 100 because of rounding.

Table B-63

EXECUTIVE PREFERENCE FOR CONFIDENTIAL RESPONSES:
AMERICAN COMPANY GROUP

Question	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Do you wish to be quoted or remain anonymous?				
Anonymous	77	81	77	85
Quoted	4	4	7	8
No answer given	14	15	7	8
Total	95	100	91	101 ^a

^aNumbers do not add to 100 because of rounding.

Table B-64

EXECUTIVE PREFERENCE FOR CONFIDENTIAL RESPONSES:
NEW YORK COMPANY GROUP

Question	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Number	Percent	Number	Percent
Do you wish to be quoted or remain anonymous?				
Anonymous	23	88	38	81
Quoted	0	0	4	9
No answer given	3	12	5	11
Total	26	100	47	101 ^a

^aNumbers do not add to 100 because of rounding.

Table B-65

AMERICAN EXCHANGE LISTING EXPENSES:
AMERICAN COMPANY GROUP

Question	Response	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
		Number	Percent	Number	Percent
Fees preclude listing?	Yes	6	6	2	2
	No	69	73	74	81
	No answer	20	21	15	16
	Total	95	100	91	99 ^a
Fees are an important portion of listing decision?	Yes	16	17	12	13
	No	59	62	66	73
	No answer	20	21	13	14
	Total	95	100	91	100
Registrar and transfer agent expenses are significant decision variables?	Yes	12	13	7	8
	No	63	66	70	77
	No answer	20	21	14	15
	Total	95	100	91	100
Expenses associated with reporting requirements are significant variables?	Yes	7	7	7	8
	No	65	68	70	77
	No answer	23	24	14	15
	Total	95	99 ^a	91	100
Total expenses associated with listing are significant?	Yes	7	7	4	4
	No	67	71	72	79
	No answer	21	22	15	16
	Total	95	100	91	99 ^a

^aNumbers do not add to 100 because of rounding.

Table B-66

NEW YORK EXCHANGE LISTING EXPENSES:
NEW YORK COMPANY GROUP

Question	Response	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
		Number	Percent	Number	Percent
Fees preclude listing?	Yes	2	8	0	0
	No	16	62	22	47
	No answer	8	31	25	53
	Total	26	101 ^a	47	100
Fees are an important portion of listing decision?	Yes	2	8	3	6
	No	14	54	20	43
	No answer	10	38	24	51
	Total	26	100	47	100
Registrar and transfer agent expenses are significant decision variables?	Yes	0	0	2	4
	No	15	58	18	38
	No answer	11	42	27	57
	Total	26	100	47	99 ^a
Expenses associated with reporting requirements are significant variables?	Yes	0	0	1	2
	No	15	58	19	40
	No answer	11	42	27	57
	Total	26	100	47	99 ^a
Total expenses associated with listing are significant?	Yes	0	0	1	2
	No	15	58	19	40
	No answer	11	42	27	57
	Total	26	100	47	99 ^a

^aNumbers do not add to 100 because of rounding.

Table B-67

EXPECTATIONS OF EXCHANGE EFFICACY:
AMERICAN COMPANY GROUP

How Listing is Expected to Effect:	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Arith- metic Mean	Standard Devia- tion	Arith- metic Mean	Standard Devia- tion
Ownership Base: (Number of Shareholders)	4.66	1.04	5.60	.90
Marketability of Stock (Saleability)	4.99	1.05	5.99	.78
Management Control	a	a	a	a
Loss of Sales Support by Over-the-Counter Market-Making Dealers	2.75	1.23	3.23	1.10
Sales of Additional Stock	4.97	.99	5.25	1.13
Transactions (Volume of sales)	4.82	1.16	5.38	.91
Company's Credit Rating	4.25	.68	4.65	.95
Access to Money and Capital Markets	4.62	.82	5.17	.93
Price Volatility of Stock (Fluctuations)	4.21	1.30	4.53	1.24
Offers an "Advertising Value"	4.55	.81	5.00	.84
Analysis of Stock and Company by Potential Investors	4.90	.83	5.51	.82
Prestige for your Company	4.82	.88	5.70	.82
Emphasis on Short-Run Operations	a	a	a	a

Table B-67 (cont'd.)

How Listing is Expected to Effect:	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Arith- metic Mean	Standard Devia- tion	Arith- metic Mean	Standard Devia- tion
Requirements for Report- ing to:				
Stockholders	3.96	.58	4.16	.93
Public	3.96	.58	4.12	.97
Exchanges	3.82	.83	4.03	1.09
Merger (Your Company's Ability to Acquire Other Firms)	4.95	.84	5.39	.96
Merger (The Attractive- ness of Your Firm, if Listed, to Other Firms)	4.56	.94	4.84	1.11
Loan Value of Stock for Shareholders	4.67	.95	5.38	1.03
Newspaper Publicity on Prices	4.75	.95	5.38	1.12
Newspaper Publicity on Volume	4.77	1.13	5.34	1.10
Current Stockholder Interest	4.74	1.01	5.44	.97
Effect on Price Per Share	4.29	.88	4.75	1.07
Spread Between "Bid" and "Ask"	4.62	1.09	5.04	1.01

^aThese questions imply "direction" as well as "intensity" and frequently went unanswered. Therefore, they were not included in the statistical programs utilized. For the answers received, the average appeared to be 4.

Table B-68

EXPECTATIONS OF EXCHANGE EFFICACY:
NEW YORK COMPANY GROUP

How Listing is Expected to Effect:	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Arith- metic Mean	Standard Devia- tion	Arith- metic Mean	Standard Devia- tion
Ownership Base: (Number of Shareholders)	5.00	.94	6.10	.97
Marketability of Stock (Saleability)	5.16	1.08	6.28	.81
Management Control	a	a	a	a
Loss of Sales Support by Over-the-Counter Market-Making Dealers	2.52	1.17	3.48	1.20
Sales of Additional Stock	4.72	.87	5.85	.99
Transactions (Volume of Sales)	4.68	1.01	5.65	1.11
Company's Credit Rating	4.20	.49	4.95	1.14
Access to Money and Capital Markets	4.68	.79	5.88	.98
Price Volatility of Stock (Fluctuations)	3.84	1.22	5.20	1.33
Offers an "Advertising Value"	4.80	.94	5.25	1.02
Analysis of Stock and Company by Potential Investors	5.16	.92	5.88	.90
Prestige for your Company	4.96	.60	6.18	.89
Emphasis on Short-Run Operations	a	a	a	a

Table B-68 (cont'd.)

How Listing is Expected to Effect:	Eligible Over-the-Counter Companies		1969 and 1970 Listed Companies	
	Arith- metic Mean	Standard Devia- tion	Arith- metic Mean	Standard Devia- tion
Requirements for Report- ing to:				
Stockholders	4.00	.28	4.15	.94
Public	4.00	.28	4.20	.93
Exchanges	3.84	.78	4.30	1.27
Merger (Your Company's Ability to Acquire Other Firms)	4.96	1.15	5.85	.96
Merger (The Attractive- ness of Your Firm, if Listed, to Other Firms)	4.32	.79	4.78	1.19
Loan Value of Stock for Shareholders	4.48	.50	4.83	1.32
Newspaper Publicity on Prices	4.64	.79	5.23	1.13
Newspaper Publicity on Volume	4.88	.91	5.15	1.17
Current Stockholder Interest	4.76	.59	5.68	.96
Effect on Price Per Share	4.32	.61	5.03	1.06
Spread Between "Bid" and "Ask"	4.36	.48	5.05	1.07

^aThese questions imply "direction" as well as "intensity" and frequently went unanswered. Therefore, they were not included in the statistical programs utilized. For the answers received, the average appeared to be 4.

Table B-69

VALUE ASSIGNED TO PROFESSIONAL OPINIONS:
AMERICAN COMPANY GROUP

Opinions of	Rank	Eligible Over-the-Counter Companies		Rank	1969 and 1970 Listed Companies	
		Arith- metic Mean	Standard Devia- tion		Arith- metic Mean	Standard Devia- tion
Company Officers	2	7.64	2.33	3	7.18	2.47
Board of Directors	1	9.26	1.40	1	8.08	2.54
Over-the-Counter Dealers	8 ^a	4.40	2.24	8	2.39	1.71
Stock Exchange Representatives	b	3.78	1.88	b	b	b
Investment Bankers	4	6.15	2.73	4	6.57	2.58
Stockholders	6	5.59	2.64	5	5.26	2.60
Legal Counsel	5	5.47	2.67	6	4.31	2.34
Institutional Investors	7 ^a	4.40	2.12	7	4.26	2.47
Your Own Opinion	3	6.37	2.28	2	7.16	2.66

^aInstitutional investors assigned the rank of 7 even though its mean was identical with the over-the-counter dealers' mean because it had a smaller distribution.

^bThis question inadvertently left off the original "Listed" company questionnaire and is not included in consideration of rank.

Table B-70

VALUE ASSIGNED TO PROFESSIONAL OPINIONS:
NEW YORK COMPANY GROUP

Opinions of	Eligible Over-the-Counter Companies			1969 and 1970 Listed Companies		
	Rank	Arith- metic Mean	Standard Devia- tion	Rank	Arith- metic Mean	Standard Devia- tion
Company Officers	2	7.00	2.91	2	7.93	2.39
Board of Directors	1	8.44	1.98	1	8.58	2.06
Over-the-Counter Dealers	7	4.20	1.44	8	2.95	2.11
Stock Exchange Representatives	a	4.05	1.91	a	a	a
Investment Bankers	5	5.20	1.94	4	7.00	2.14
Stockholders	3	6.44	2.71	5	6.13	2.79
Legal Counsel	6	4.64	2.64	7	4.15	2.61
Institutional Investors	8	3.28	1.51	6	4.98	2.57
Your Own Opinion	4	6.04	2.69	3	7.50	2.40

^aThis question inadvertently left off the original "Listed" company questionnaire. Not included in ranking.

Table B-71

DISCRIMINANT COEFFICIENTS FOR THE
AMERICAN AND NEW YORK COMPANY GROUPS

Variable	Discriminant Coefficients for:	
	American Company Group	New York Company Group
Ownership Base	0.4603	0.0993
Marketability of Stock	0.3902	0.0548
Loss of Sales Support	0.0364	0.1751
Sales of Additional Stock	-0.2200	0.1898
Transactions	-0.2831	0.0536
Company's Credit Rating	-0.1264	-0.1062
Capital Market Access	0.1025	0.1185
Price Volatility of Stock	-0.1276	0.1235
Offers an "Advertising Value"	0.0461	0.0978
Analysis of Stock and Company	-0.0214	-0.1343
Prestige for your Company	0.0890	0.1911
Requirements for Reporting to:		
Stockholders	0.0241	0.6773
Public	0.0579	-0.4172
Exchanges	-0.0623	-0.0976
Merger: to Acquire	-0.0793	-0.0956
Merger: to be Acquired	-0.0035	0.0176
Loan Value of Stock	0.3003	-0.0166
Newspaper Publicity on:		
Prices	0.0469	-0.1407
Volume	0.0407	-0.1108
Stockholder Interest	0.2671	0.2224

Table B-71 (cont'd.)

<u>Variable</u>	<u>Discriminant Coefficients for:</u>	
	<u>American Company Group</u>	<u>New York Company Group</u>
Effect on Price Per Share	0.1442	-0.0164
Spread Between Bid and Ask	-0.1017	-0.0214
<u>Opinion Weights of:</u>		
Company Officers	-0.0508	-0.0505
Board of Directors	-0.1486	-0.0241
OTC Dealers	-0.3868	-0.0160
Investment Banker	0.1242	0.0977
Stockholders	-0.1206	0.0540
Legal Counsel	-0.1585	-0.1649
Institutional Investors	0.0838	0.1797
Your Own Opinion	0.0755	-0.0571

Table B-72

CLUSTERING OF THE LISTING EXPECTATION VARIABLES:
UNLISTED AMERICAN COMPANIES

Cluster Number	Cluster Name (Items Included)
1	<u>Exchange Effects</u> ownership base marketability of stock transactions (volume) effect on share price
2	<u>Loss of OTC Market Support</u> loss of sales support
3	<u>Reporting Requirements</u> stockholders public exchanges
4	<u>Newspaper Publicity</u> volume publicity
5	<u>Obtainment of Funds</u> company's credit rating access to capital markets advertising value loan value of stock
6	<u>(Cluster not named)</u> company prestige price publicity stockholder interest
7	<u>(Cluster not named)</u> sales of additional stock price volatility of stock spread: between bid and ask
8	<u>(Cluster not named)</u> analysis of stock and company merger (ability to acquire) merger (attractiveness of your firm)

Table B-73

CLUSTERING OF THE LISTING EXPECTATION VARIABLES:
LISTED AMERICAN COMPANIES

Cluster Number	Cluster Name (Items Included)
1	<u>Exchange Effects</u> ownership base marketability transactions (volume) effect on price spread: between bid and ask
2	<u>Loss of OTC Market Support</u> loss of sales support
3	<u>Reporting Requirements</u> stockholders public exchanges
4	<u>Newspaper Publicity</u> price publicity volume publicity
5	<u>Obtainment of Funds</u> company's credit rating access to capital markets
6	<u>(Cluster not named)</u> price volatility of stock advertising value analysis of stock and company company prestige
7	<u>(Cluster not named)</u> merger (ability to acquire) loan value of stock stockholder interest
8	<u>(Cluster not named)</u> sales of additional stock merger (attractiveness of your firm)

Table B-74

A FACTOR ANALYSIS OF THE LISTING EXPECTATION VARIABLES:
UNLISTED AMERICAN COMPANIES

Factor Number	Factor Name (Items Included)	Percent Explained by Factor
1	<u>Exchange Effects</u> marketability transactions effects on price per share	18.8
2	<u>Loss of OTC Market Support</u> loss of sales support price volatility of stock	9.3
3	<u>Reporting Requirements</u> stockholders public exchanges	12.2
4	<u>Newspaper Publicity</u> volume publicity	8.4
5	<u>Obtainment of Funds</u> access to capital markets analysis of stock and company company's credit rating	20.4
	Total	69.1

Table B-75

A FACTOR ANALYSIS OF THE LISTING EXPECTATION VARIABLES:
LISTED AMERICAN COMPANIES

Factor Number	Factor Name (Items Included)	Percent Explained by Factor
1	<u>Volume of Sales</u> transactions	12.9
2	<u>Corporate Status</u> company prestige advertising value	10.2
3	<u>Reporting Requirements</u> stockholders public exchanges	14.0
4	<u>Newspaper Publicity</u> price publicity volume publicity	12.0
5	<u>Obtainment of Funds</u> company's credit rating access to capital markets	8.2
6	<u>Utility of Stock</u> sales of additional stock merger (ability to acquire) loan value of stock	8.2
7	<u>(Factor not Named)</u> merger (attractiveness of your firm) loss of sales support	5.6
Total		71.1

Table B-76

CLUSTERING OF THE PROFESSIONAL OPINION VARIABLES:
UNLISTED AMERICAN COMPANIES

Cluster Number	Opinions of:
1	Company Officers Board of Directors Your own Opinion
2	Over-the-Counter Dealers Investment Bankers
3	Stockholders Institutional Investors
4	Legal Counsel

Table B-77

CLUSTERING OF THE PROFESSIONAL OPINION VARIABLES:
LISTED AMERICAN COMPANIES

Cluster Number	Opinions of:
1	Company Officers Board of Directors
2	Over-the-Counter Dealers Institutional Investors
3	Stockholders Legal Counsel
4	Investment Bankers Your own Opinion

Table B-78

A FACTOR ANALYSIS OF THE PROFESSIONAL OPINION VARIABLES:
UNLISTED AMERICAN COMPANIES

Factor Number		Percent Explained by Factor
1	Company Officers Board of Directors Your Own Opinion	19.4
2	Stockholders Institutional Investors	15.9
3	Over-the-Counter Dealers Investment Bankers	19.1
4	Legal Counsel	14.7
	Total	69.1

Table B-79

A FACTOR ANALYSIS OF THE PROFESSIONAL OPINION VARIABLES:
LISTED AMERICAN COMPANIES

Factor Number		Percent Explained by Factor
1	Company Officer Board of Directors Your Own Opinion	27.1
2	Legal Counsel Institutional Investors	25.6
	Total	52.7

Table B-80

CLUSTERING OF THE LISTING EXPECTATION VARIABLES:
UNLISTED NEW YORK COMPANIES

Cluster Number	Cluster Name (Items Included)
1	<u>Exchange Effects</u> ownership base marketability transactions stockholders interest effect on share price
2	<u>Loss of OTC Market Support</u> loss of sales support price volatility of stock
3	<u>Reporting Requirements</u> stockholders public exchanges
4	<u>Corporate Visibility</u> advertising value stock and company analysis volume publicity
5	<u>Obtainment of Funds</u> stock sales credit rating access to capital markets company prestige price publicity
6	<u>(Cluster not Named)</u> merger (ability to acquire) spread: between bid and ask
7	<u>(Cluster not Named)</u> merger (attractiveness of your firm)
8	<u>(Cluster not Named)</u> loan value of stock

Table B-81

CLUSTERING OF THE LISTING EXPECTATION VARIABLES:
LISTED NEW YORK COMPANIES

Cluster Number	Cluster Name (Items Included)
1	<u>Exchange Effects</u> ownership base transactions stockholder interest effect on share price
2	<u>Loss of OTC Market Support</u> loss of sales support loan value of stock
3	<u>Reporting Requirements</u> stockholders public exchanges
4	<u>Corporate Visibility</u> advertising value company prestige analysis of stock and company marketability
5	<u>Obtainment of Funds</u> credit rating access to capital markets
6	<u>Newspaper Publicity</u> price publicity volume publicity merger (to acquire)
7	<u>(Cluster not Named)</u> price volatility of stock spread: between bid and ask
8	<u>(Cluster not Named)</u> stock sales merger (attractiveness of your firm)

Table B-82

A FACTOR ANALYSIS OF THE LISTING EXPECTATION VARIABLES:
UNLISTED NEW YORK COMPANIES

Factor Number	Factor Name (Items Included)	Percent Explained by Factor
1	<u>Exchange Effects</u> ownership base marketability of stock transactions	21.3
2	<u>Loss of OTC Market Support</u> loss of sales support price volatility of stock	8.4
3	<u>Reporting Requirements</u> stockholders public exchanges	10.4
4	<u>Corporate Visibility</u> merger (attractiveness of your firm) advertising value	8.5
5	<u>Obtainment of Funds</u> credit rating access to capital markets	16.3
6	<u>Utility of Stock</u> loan value of stock	8.3
7	<u>Share Price Effects</u> effect on share price spread: between bid and ask	6.4
	Total	79.6

Table B-83

A FACTOR ANALYSIS OF THE LISTING EXPECTATION VARIABLES:
LISTED NEW YORK COMPANIES

Factor Number	Factor Name (Items Included)	Percent Explained by Factor
1	<u>Exchange Effects</u> ownership base transactions	11.7
2	<u>Loss of OTC Market Support</u> loss of sales support loan value of stock	7.0
3	<u>Reporting Requirements</u> stockholders public exchanges	13.5
4	<u>Corporate Visibility</u> advertising value company prestige analysis of stock and company	12.9
5	<u>Obtainment of Funds</u> credit rating access to capital markets	7.8
6	<u>Newspaper Publicity</u> price publicity volume publicity	11.2
7	<u>(Factor not Named)</u> stock sales merger (attractiveness of your firm)	8.8
		—
	Total	72.9

Table B-84

CLUSTERING OF THE PROFESSIONAL OPINION VARIABLES:
UNLISTED NEW YORK COMPANIES

Cluster Number	Opinions of:
1	Company Officers Board of Directors Stockholders
2	Over-the-Counter Dealers Investment Bankers Institutional Investors Your Own Opinion
3	Legal Counsel

Table B-85

CLUSTERING OF THE PROFESSIONAL OPINION VARIABLES:
LISTED NEW YORK COMPANIES

Cluster Number	Opinions of:
1	Company Officers Board of Directors Investment Bankers Stockholders Legal Counsel
2	Over-the-Counter Dealers
3	Institutional Investors Your Own Opinion

Table B-86

A FACTOR ANALYSIS OF THE PROFESSIONAL OPINION VARIABLES:
UNLISTED NEW YORK COMPANIES

Factor Number		Percent Explained by Factor
1	Board of Directors Stockholders	30.8
2	Institutional Investors Your Own Opinion	23.0
3	Legal Counsel	15.8
	Total	69.6

Table B-87

A FACTOR ANALYSIS OF THE PROFESSIONAL OPINION VARIABLES:
LISTED NEW YORK COMPANIES

Factor Number		Percent Explained by Factor
1	Board of Directors Stockholders	23.6
2	Institutional Investors Your Own Opinion	21.7
3	Over-the-Counter Dealers	15.7
	Total	61.0

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