

THE WEALTH IMPACT OF PRIVATE PLACEMENTS OF  
DEBT WHERE THE LENDER IS SPECIFIED

By

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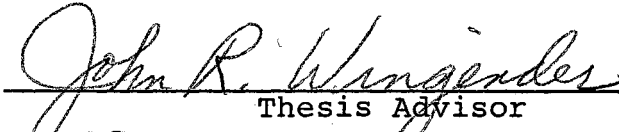
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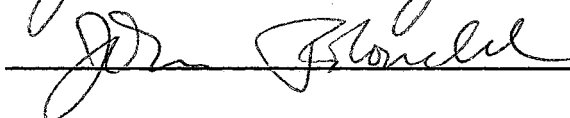
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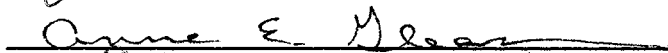
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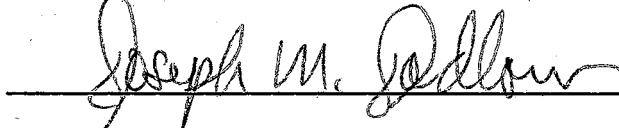
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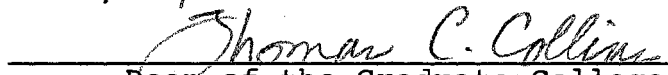
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## TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION . . . . .	1
II. LITERATURE REVIEW. . . . .	13
Introduction. . . . .	13
Role of Financial Intermediaries in Capital Markets . . . . .	13
Empirical Studies . . . . .	21
Empirical Studies: Public Offerings . . . . .	22
Empirical Studies: Bank Loans . . . . .	23
Empirical Studies: Investment Bankers. . . . .	32
Privately Placed Securities . . . . .	36
Comparison of Public and Private Offerings. . . . .	38
Comparison of Bank Loans and Insurance Companies as Lenders . . . . .	42
Empirical Studies: Private Placements . . . . .	46
Hypotheses Statements. . . . .	51
III. METHODOLOGY. . . . .	63
Introduction. . . . .	63
Testable Hypotheses . . . . .	63
Description of the Sample . . . . .	69
Event Study Methodology . . . . .	70
Cross-Sectional Regression Analysis . . . . .	75
Independent Variables. . . . .	76
IV. EMPIRICAL RESULTS. . . . .	82
Stock Price Response to Private Placements. . . . .	82
Stock Price Response for a Single Lender . . . . .	88
Stock Price Response for Multiple Lenders. . . . .	95
Stock Price Response Associated with Investment Banking Firm Categories . . . . .	99
Regression Analysis . . . . .	113
Size Related Variables . . . . .	114
Maturity Variables . . . . .	117
Risk Variables . . . . .	118
Insurance and Issue Related Variables. . . . .	119

Chapter	Page
Special and Issue Related Variables .	120
Insurance, Special, and Issue Related Variables . . . . .	123
V. SUMMARY AND CONCLUSIONS . . . . .	125
Summary of Empirical Results . . . . .	125
Implications for Future Research . . . . .	130
REFERENCES . . . . .	134

## LIST OF TABLES

Table	Page
I. Abnormal Returns for Public Offerings. . . . .	24
II. Abnormal Returns for Bank Loans, Commercial Paper Offerings and Private Placement. . . . .	25
III. Descriptive Statistics for Private Placements of Debt. . . . .	37
IV. Hypotheses Statements. . . . .	64
V. Sample Descriptive Statistics from the Period January 1980 through December 1990 . . . . .	71
VI. Regression Model . . . . .	77
VII. Notation to be Analyzed. . . . .	83
VIII. Abnormal Returns for the Full Sample of Private Placements of Debt . . . . .	85
IX. Significance of the Difference in Means Test for the Full Sample. . . . .	87
X. Abnormal Returns for Private Placements of Debt Where the Lender is Specified . . . . .	90
XI. Abnormal Returns for Private Placements of Debt by Industrial Firms Where the Lender is Specified . . . . .	91
XII. Abnormal Returns for Private Placements of Debt by Utility Firms Where the Lender is Specified. . . . .	92
XIII. Abnormal Returns for Private Placements of Debt by Financial Firms Where the Lender is Specified. . . . .	93
XIV. Abnormal Returns for Private Placements of Debt for Investment Banker Categories. . . . .	101

Table	Page
XV. Abnormal Returns for Private Placements of Debt Where the Lender is Specified for Investment Banking Firm Categories . . . . .	102
XVI. Abnormal Returns for Private Placements of Debt Where No Lender is Specified for Investment Banking Firm Categories . . . . .	103
XVII. Abnormal Returns for Private Placements of Debt for Lender Categories and Investment Banking Firm Categories. . . . .	106
XVIII. Abnormal Returns for Private Placements of Debt by Industrial Firms and Investment Banking Firm Categories. . . . .	107
XIX. Abnormal Returns for Private Placements of Debt by Utility Firms and Investment Banking Firm Categories. . . . .	108
XX. Abnormal Returns for Private Placements of Debt by Financial Firms and Investment Banking Firm Categories. . . . .	109
XXI. Abnormal Returns for Private Placements of Debt by Industrial and Utility Firms Where the Lender is an Insurance Company for Investment Banking Firm Categories and Where the Lender is not an Insurance Company for Investment Banking Firm Categories . . . . .	110
XXII. Significance of the Difference in Means Test for Private Placements of Debt by Industrial Firms for Lender Categories and Investment Banking Firm Categories . . . . .	111
XXIII. Estimates of Weighted Least Squares Regressions Where the Lender is Specified for Industrial Firms and Utility Firms for Issue of Related Variables . . . . .	116
XXIV. Estimates of Weighted Least Squares Regressions Where the Lender is Specified for Industrial Firms and Utility Firms for Issue Related Variables and a Dummy Variable Representing Insurance Company Lenders. . . . .	121

Table	Page
XXV. Estimates of Weighted Least Squares Regressions Where the Lender is Specified for Industrial Firms and Utility Firms for Issue Related Variables and a Dummy Variable Representing the Special Category of Investment Banking Firms . . . . .	122
XXVI. Estimates of Weighted Least Squares Regressions Where the Lender is Specified for Industrial Firms and Utility Firms for Issue Related Variables and a Dummy Variable Representing Insurance Company Lenders and a Dummy Variable Representing the Special Category of Investment Banking Firm Categories . . . . .	124



## CHAPTER I

### INTRODUCTION

If capital markets were perfect, borrowing firms would obtain funds from lenders based upon the true value and risk associated with the projects for which they seek financing. However, information asymmetries which exist in capital markets hamper this transfer of funds. Asymmetric information refers to the inequality of information among market participants. A borrowing firm usually has access to superior information about potential returns and risks associated with the projects for which they seek financing. This information is referred to as private information. Prospective investors would benefit from the knowledge of the true characteristics of the borrowing firm, however information asymmetries result in problems, such as the adverse selection and moral hazard problems, that inhibit this direct transfer of private information.

Adverse selection occurs when the borrower who is most likely to produce an undesirable outcome is the borrower who most actively seeks financing from lenders. In the context of raising funds in capital markets, a borrowing firm has an incentive to overstate the quality of their projects in order to obtain a lower cost of funds. Verification of the

true characteristics of the borrowing firm by prospective investors, who are informationally disadvantaged, may be costly or even impossible. As a result, information transfer may not occur, which could lead to market failure.

Moral hazard problems occur when the borrower has an incentive to engage in activities after contracting that are undesirable from the perspective of the lender. For instance, a borrowing firm may pursue projects after obtaining funds from uninformed lenders which offer the potential for higher rewards, but also have a higher degree of risk. These activities increase the likelihood that the borrowing firm will be unable to repay the loan. Since lenders are aware of these potential moral hazard problems, they may forego providing capital for profitable investment opportunities, thereby resulting in an inefficient transfer of funds in capital markets.

Previous studies such as Dann and Mikkelson (1984), Eckbo (1986), Asquith and Mullins (1986), Masulis and Kowar (1986) and Mikkelson and Partch (1986), have documented non-positive stock price responses associated with public security offerings. In general, these studies suggest that investors infer negative information about the borrowing firm as a result of information asymmetry problems associated with public security offerings. Miller and Rock (1985) suggest that unexpected external security offerings indicate less than expected internally generated cash flows, thus resulting in negative stock price responses to

announcements of security issuances. Myers and Majluf (1984) suggest that managers have access to superior information regarding the true value of the borrowing firm. They argue that managers can exploit their inside information by issuing securities in capital markets when their firm is overvalued. Investors recognize this incentive and infer negative information about the value of the borrowing firm at the announcement of a security issuance. In the absence of an unambiguous signal regarding true value, high quality borrowing firms will be paid less for their securities than the price associated with the true value of the firm.

Borrowing firms may instead utilize private placements of debt to signal positive information about their future prospects to market participants. A private placement is a security issue that is directly sold to selected institutional investors. Private placements of debt are exempt from registration and disclosure requirements of the Securities and Exchange Commission (SEC). As a result, details of the private placement agreement are not necessarily made publicly available. These factors contribute to the confidential nature of the private placement market, because in many cases the terms of the issue, as well as the lender participating in the private placement agreement are not made publicly available.

We hypothesize that reputable lenders in private placements of debt, such as insurance companies, provide

services which are viewed by the market as a signal about the true value of the borrowing firm. One of the primary reasons the SEC does not require registration and public disclosure of information in private placements of debt is that lenders in this market are assumed to have the sophistication and expertise necessary to evaluate the borrowing firm's securities without SEC intervention (Fields and Mais, 1991). We hypothesize that insurance companies have developed a reputation associated with their lending activities in this market and other market participants infer positive information about the borrowing firm based upon the knowledge that an insurance company is participating in the private placement.

The certification and monitoring roles of reputable lenders in private placement of debt may help to alleviate adverse selection problems associated with security offerings. Through the process of negotiating the terms of the private placement, potential lenders are given access to private information about the financial prospects of the borrowing firm. Lenders in private placements then evaluate the debt issue based upon private information supplied by the borrowing firm. Completion of the private placement indicates the lender is willing to risk their reputational capital by providing financing to the borrowing firm, thus providing a signal to other market participants regarding the true value of the firm.

Private placements of debt may also result in effective monitoring of borrowing firms that will help alleviate moral hazard problems. Lenders in private placements of debt are given access to private information about the firm's financial prospects and condition covenants on the basis of this private information. Covenants can be written that address special concerns of the lenders.

Smith and Warner (1979) observe that private placements of debt tend to have more restrictive covenants than public debt issues. They suggest that agency problems are less costly to resolve in private placements than public debt offerings. Because there are more investors participating in a public debt offering than a private placement of debt, investors will take smaller positions of the debt issue (Blackwell and Kidwell, 1988). As a result, there is the possibility of duplication of monitoring expense associated with public debt offerings where all lenders expend resources monitoring the borrowing firm or, alternatively, the free rider problem where a lender receives the benefits of monitoring without incurring monitoring costs.

In private placements of debt, private information is revealed to a small number of lenders, particularly given that many private placements of debt have only one participating lender. The lender then conditions covenants on the basis of this private information and monitors the activities of the borrowing firm during the life of the bond

contract. With a single lender monitoring the borrowing firm in private placements of debt, the free rider problem and the problem of duplication of monitoring costs are virtually eliminated.

The wealth impact associated with private placement offerings has not been examined extensively in the literature. However, recent studies suggest that private placements can result in a stock price response altogether different from those associated with public security offerings. In contrast to the negative stock price response associated with public equity offerings, Wruck (1989) found announcements of private placements of equity resulted in a positive stock price response. Studies which examined the wealth impact of private placements of debt have found mixed results. Mikkelsen and Partch (1986) and James (1987) found non-positive, insignificant stock price responses for private placements of debt made by industrial borrowing firms. It should be noted that the emphasis of these studies was on public offerings and bank loans respectively and these studies did not explore any cross-sectional variation in their sample of private placements.

Szewczyk and Varma (1991) found a significantly positive stock price response associated with private placements of debt by public utility borrowing firms. They suggest that the benefits associated with private placements of debt help to reduce information asymmetries associated with security issues. However, Asquith and Mullins (1986)

and Masulis and Kowar (1986) found that the excess returns resulting from security offerings by utilities are less negative than those associated with industrial firms. The implication is that utility regulation, rather than the benefits associated with private placements, may help to reduce information asymmetries associated with private placements of debt by utilities.

The role of lenders participating in private placements of debt has not been addressed in previous empirical studies. The identity of the lender in the private placement of debt may provide positive information to the market about the borrowing firm, particularly given the confidential nature of the private placement market. During the negotiating process associated with private placements of debt, private information about the financial prospects of the borrowing firm is revealed to the lender. Completion of the private placement indicates that on the basis of their evaluation of private information, a specified lender is willing to provide financing and monitor the activities of the borrowing firm during the loan. High quality borrowing firms may, therefore, signal their true value to the market by announcing that they have placed debt privately with a reputable lender. If the market perceives that a particular category of lender has developed a reputation of providing more valuable services relative to other lenders in the private placement market, then a positive stock price response would be expected for that

type of lender. James (1987) and Szewczyk and Varma (1991) identify insurance companies as the primary lender in private placements of debt. In addition, bonds comprise the largest component of insurance companies' asset portfolios. Maher (1989) suggests that because of these factors insurance companies have developed a reputation of providing expert credit evaluation among the categories of lenders in the private placement of debt market.

There are many similarities between the role of insurance companies as lenders in private placements of debt and the bank lending process. Banks have developed a reputation of providing valuable certification and monitoring services associated with their lending activities. Insurance companies perform similar roles in private placements of debt, since they evaluate the borrowing firm on the basis of private information and monitor the activities of the firm throughout the life of the bond contract. Given the short-term nature of bank loans, the renewal process provides banks with recourse because borrowing firms must submit themselves to periodic evaluation in order to renew credit agreements. Although private placements of debt are not renewed, insurance companies can purchase the common stock of the borrowing firm and thus affect the firm's activities throughout the loan. This provides insurance companies with a mechanism of recourse similar to the short-term renewal process associated with bank loans.



James (1987) and Lummer and McConnell (1989) found a positive stock price response associated with announcements of new bank loans and renewals to existing bank loans respectively. These studies suggest that the bank lending process provides positive information to the market about the borrowing firm which helps to alleviate information asymmetries inherent in the securities issuance process. Since insurance companies provide services similar to those associated with bank loans, we hypothesize that announcements of private placements of debt to an insurance company may provide the market with a positive signal about the value of the borrowing firm.

Private placements of debt are sometimes arranged directly between borrowers and lenders without the assistance of investment bankers. However, in many cases borrowing firms will utilize an investment banker to provide advice during the private placement process. Beatty and Ritter (1986), Hughes (1986), and Smith and Booth (1986) suggest that investment bankers perform a valuable role in security issuance by certifying that the issue price is consistent with private information. Investment bankers have reputational capital at stake since they underwrite and advise many different issues over time. As a result, investment bankers earn a return based upon the reputation they develop. Slovin, Sushka and Hudson (1990) found that the more valuable the reputation of the investment banker, the greater the value of the certification services they

provide. Hansen and Torregrosa (1992) suggest that in addition to certification services, investment banking firms provide valuable monitoring services during the security issuance process, where monitoring is defined as investigating the borrowing firm with the objective of improving performance. They suggest that monitoring by reputable investment banking firms helps reduce agency costs. This study will examine the impact of a firm's choice of investment banking firm during the private placement process. If prestigious investment banking firms are perceived as providing more valuable monitoring and certification services, then utilization of prestigious investment banking firms in the private placement process should have a favorable impact on firm value. Furthermore, the importance of the role of investment bankers will be examined in the context of private placements of debt to an insurance company.

Wruck (1989), Szeczyk and Varma (1991) and Fields and Mais (1991) state that in some instances there is more than one lender participating in a single private placement of debt, although the number of lenders participating in private placements of debt are small in comparison to public debt offerings. The stock price response associated with announcements of private placements of debt may be related to the number of lenders participating in the private placement. Private placements which specify more than one lender indicate that the borrowing firm has provided private

information to more than one specified lender. Completion of the private placement indicates the confidence of the lenders in the future prospects of the borrowing firm, which may send a positive signal to the market about the value of the borrowing firm. There are also costs associated with having several lenders participating in a single private placement. Private information about the borrowing firm is revealed to more lenders, thus diminishing the advantage of privacy of information associated with the private placement market. There is also the possibility of duplication of monitoring efforts and costs, since several lenders will be performing monitoring activities. Private placements of debt which specify more than one participating lender may also result in free rider problems, where other market participants receive the benefits of monitoring without incurring monitoring costs. Therefore, this study will investigate the role of the number of lenders participating in private placements of debt in which the lender is specified.

This dissertation is organized as follows: Chapter I provides an introduction to the private placement market and develops a rationale for studying the wealth impact of lenders participating in private placements of debt. Chapter II reviews the literature regarding theories of financial intermediation and the capital market's response to various types of security offerings and presents hypotheses to be tested. Chapter III provides an

explanation of the data collection process and the methods to be used. Chapter IV presents the empirical results of the study and provides an explanation regarding the implications of these results. Chapter V contains a summary of the empirical results, conclusions that were drawn based upon these results, and implications for future research.

## CHAPTER II

### LITERATURE REVIEW

#### Introduction

This chapter reviews theoretical studies which have examined the benefits associated with financial intermediation since the primary lenders in private placements of debt are financial intermediaries. In addition, empirical studies are discussed which have examined the wealth impact associated with public debt offerings, the benefits of bank loans, and the role of investment banking firms in security offerings. A description of private placements of debt is presented along with a comparison of private placements of debt, public debt offerings and bank loans. This chapter concludes with a review of recent studies which examined the stock price response associated with announcements of private placements and the importance of the role of lenders in private placements of debt.

#### Role of Financial Intermediaries in Capital Markets

Leland and Pyle (1977) have developed a theory of financial intermediation based upon information asymmetries

which exist in capital markets. Borrowers typically have superior information regarding projects for which they seek financing. Lenders would benefit from the knowledge of the true value of these projects, but there is an incentive for borrowers to exaggerate the positive qualities of their projects in order to achieve potentially substantial rewards. Verification of the true characteristics of the projects by the lender may be costly or even impossible. Information transfer may not occur, thus leading to potential market failure.

Leland and Pyle (1977) suggest that information transfer may occur if the actions of persons with inside information can be observed. The willingness of an individual borrower to invest in his own project may serve as a signal regarding the true quality of the project. The borrower knows the true quality of the project, therefore the willingness of the borrower to invest in his project sends a credible signal to the market regarding that true value. Lenders will then value the project based upon the willingness of the borrower to invest in the project. This implies that high concentration of ownership in projects by borrowers conveys positive information to the capital market. Thus, firm value increases with the portion of the firm held by the borrower.

Leland and Pyle (1977) suggest that their findings have direct applicability to the existence of financial intermediaries in capital markets. Financial intermediation

can be viewed as a natural response to informational asymmetries. There is something intrinsic in the intermediation process that helps solve problems that inhibit information transfer. As was noted previously, it is often difficult or even impossible for lenders to distinguish good information from bad information regarding borrowing firms. However, this problem may be resolved if the firms utilize a financial intermediary. Financial intermediaries are given access to information regarding the value of borrowing firms that is not made publicly available. A return from this information can occur only if buyers of intermediaries' claims believe that intermediaries use or produce reliable information about borrowing firms. This point becomes particularly critical when analyzing the capital market's response to various security offerings. If the market perceives that a particular type of intermediary has developed a reputation of producing more reliable information regarding borrowing firms relative to other intermediaries, then a greater excess return would be expected for borrowing firms that utilize that type of intermediary. For instance, high quality firms may utilize a reputable financial intermediary for their financing needs in order to provide a signal to the market of their true value, thus helping to reduce information asymmetries.

Campbell (1979) suggests that another reason for the existence of financial intermediaries in capital markets is that intermediaries protect confidential information

regarding borrowing firms. The value of information possessed by borrowing firms is conditional upon the information remaining confidential. For example, if information regarding a technological process or marketing strategy inherent in the firm's production process is revealed to the public, the firm could lose its competitive advantage. As a result, firm value would be diminished. If managers act in the best interest of the owners of the firm, then they will seek financing sources that will protect the confidentiality of information pertaining to their firm and preserve profits for the current owners of the firm.

Several obstacles must be overcome for a financing strategy to be effective in protecting the interests of the current owners of the firm. The current owners of the firm must be assured that the financing source will not use the private information to take advantage of the current owners. Therefore, the owners of the firm must be assured that the private information will remain confidential. Financial intermediaries may be used to overcome this obstacle. Financial intermediaries are given access to private information regarding borrowing firms. Since intermediaries provide financing for many types of borrowing firms and earn a return based upon the reputation that they have developed over time, they have an incentive to protect confidential information, otherwise borrowing firms would go elsewhere for their financing needs. Another obstacle that must be overcome is that the market must perceive that the recipient



of the private information is in a position to verify its accuracy. As Leland and Pyle (1977) suggest, the market must perceive that the financial intermediary produces reliable information regarding the borrowing firm in order for the financial intermediary to provide credible signals regarding the future prospects of the borrowing firm.

Diamond (1984) has developed a theory of intermediation based upon the hypothesis that financial intermediaries minimize the cost of monitoring information regarding borrowing firms. In addition to information asymmetry problems, another disadvantage associated with direct lending with borrowing firms is that it is costly for an individual lender to monitor the activities of a borrowing firm. Considerable resources would be expended for the lender to individually monitor the borrower's activities in order to determine whether the firm is in compliance with the requirements of the loan agreement. The cost of monitoring becomes particularly high when firms utilize several lenders for their financing needs where all lenders spend resources monitoring the firm and each lender holds only a small portion of the firm's total debt outstanding, resulting in duplication of monitoring activities.

An associated problem when raising capital using several lenders is the free rider problem. The free rider problem occurs when one lender spends resources monitoring the activities of the borrowing firm, while other participating lenders receive the benefits of this lender's

monitoring without incurring the associated costs. Since the lender monitoring the borrowing firm is not receiving all of the benefits resulting from monitoring, he will not have an incentive to continue expending resources monitoring the borrowing firm. The ultimate result of the free rider problem is that no lender monitors the borrowing firm, resulting in inefficient information transfer and continued asymmetric information problems.

One possible solution to these problems would be for one type of lender to monitor the activities of the borrowing firm on behalf of other lenders. However, this delegated monitoring activity gives rise to incentive problems, which Diamond (1984) defines as delegation costs. For a lender to perform this delegated monitoring role, there must be a cost advantage associated with this activity. Diamond (1984) goes on to suggest that financial intermediaries have that cost advantage in performing delegated monitoring activity. Financial intermediaries raise funds from many customers and promise customers a given pattern of returns or benefits, depending on the type of financial intermediary utilized. Financial intermediaries lend funds to borrowers and spend resources monitoring the activities of borrowing firms in order to protect their customer's interests. These intermediaries take full responsibility and bear all penalties associated with any short-fall of payments or benefits to their customers. He suggests that diversification within the

financial intermediary's loan portfolio reduces the probability of incurring these penalties and provides the necessary incentives for the intermediary to provide delegated monitoring activities.

Diamond (1991) provides further evidence regarding the monitoring role of lenders in security offerings. Directly placed debt, such as commercial paper, and public debt offerings contain covenants and other loan provisions that are based only upon publicly available information. During the credit evaluation process, financial intermediaries utilize this publicly available information as well as private information obtained from costly monitoring of the borrowing firm's activities in order to decide whether to provide financing. Diamond (1991) suggests that a borrower's reputation acquired when monitored by a financial intermediary, such as a bank, helps to predict the future actions of borrowers when not monitored, such as when the borrowing firm issues public debt or commercial paper. The bank lending process helps to screen out some borrowers who are caught taking actions that are in their self-interest. This result indicates that financial intermediaries, such as banks, that are given access to private information and also provide monitoring activities reduce moral hazard problems associated with security offerings.

The costs associated with financial intermediation has not been examined in the literature to the same extent as the benefits. Rajan (1992) distinguishes between financing

sources by their ability to acquire information about the borrowing firm. He refers to bank loans as informed debt since the bank is given access to information during the lending process that is not necessarily publicly available. However, lenders in arms-length debt, such as public debt offerings, utilize only publicly available information. Rajan (1992) suggests that there is a trade-off between the benefits of short-term informed debt, long-term informed debt, and arm's length public debt. Although short-term informed debt, such as bank loans, provide flexible financing to borrowing firms, the cost of this financing is that banks can affect the borrowing firm's decisions during the maturity of the loan. If borrowing firms utilize short-term informed debt for their financing needs, then the lender can have bargaining power over the firm's profits when the loan is renewed. In some instances, lenders may choose not to renew the loan at maturity unless the borrowing firm agrees to share part of the surplus resulting from the project with the lender. If the firm no longer receives all the surplus from the project, they exert lower effort than optimal, thus reducing the project's returns. Borrowing firms that need long-term financing may have an incentive to utilize long-term arm's length debt rather than continually renewing short-term bank loans in order to avoid the above costs associated with banks loans.

Rajan (1992) suggests that both the benefits and costs associated with short-term informed debt is applicable to

long-term informed debt if the lender has an exogenous source of power over the borrowing firm. An example of this power would be lenders which have the ability to purchase shares of the borrowing firm's common stock. The lender can affect the borrowing firm's decisions during the maturity of the loan through the lender's voting rights, regardless of whether the debt is short-term or long-term, thus providing the managers of the borrowing firm with an incentive to devote the effort necessary to achieve optimal results. In this situation, the lender's ability to purchase stock provides them with recourse similar to the renewal process associated with short term informed debt.

#### Empirical Studies

Thus far, three primary reasons have been examined regarding the existence of financial intermediaries in capital markets: (1) financial intermediaries produce reliable information regarding borrowing firms, thereby helping to reduce information asymmetries; (2) financial intermediaries help protect the confidentiality of information regarding borrowing firms; and (3) financial intermediaries provide a valuable monitoring role in capital markets, although the cost is that financial intermediaries can affect decision making during the term of the loan. In order to further analyze the benefits associated with financial intermediation, it would be useful to examine the

capital market's response to borrowing firms which utilize financial intermediaries for their financing needs. Summary statistics noted in previous empirical studies regarding the stock price response associated with public security offerings, bank loans, commercial paper offerings, and private placements are presented in Table I and Table II respectively.

Empirical Studies: Public Offerings

Studies which have examined the wealth impact of public security offerings include Mikkelson and Partch (1986), Asquith and Mullins (1986), Masulis and Korwar (1986), Eckbo (1986), and Dann and Mikkelson (1984). In each of these studies standard event study methodology was utilized in order to measure the market's response to announcements of various types of security offerings. Three generalizations can be drawn from these studies regarding the relative impact of public security offerings on firm value: (1) the average abnormal returns for public offerings of all types of securities are non-positive; (2) abnormal returns associated with common stock offerings are negative and larger in value than those observed for preferred stock or debt; (3) abnormal returns for announcements of convertible offerings are negative and larger in absolute value than those for corresponding non-convertible securities.

One possible explanation for the negative stock price response associated with public offerings of securities is information asymmetries associated with the public market. This would be consistent with theoretical models developed by Myers and Majluf (1984) and Miller and Rock (1985) which predict negative stock price reactions associated with public offerings (i.e., external financing decisions). Myers and Majluf (1984) suggest that managers will utilize external financing sources only when they believe the firm's securities are overpriced in relation to their true value, whereas Miller and Rock (1985) suggest that any unexpected external financing decision indicates the firm has less-than-expected internal financing sources. Consequently, these studies suggest that investors infer negative information about the future prospects of the borrowing firm as a result of the public offering.

#### Empirical Studies: Bank Loans

To further understand the benefits associated with intermediation, researchers have examined the stock price response associated with announcements of bank lending agreements. Banks are financial intermediaries which accept funds from depositors, loan funds to borrowers, and monitor the activities of the borrowing firms in order to determine

TABLE I  
ABNORMAL RETURNS FOR PUBLIC OFFERINGS

Author	Type of Issue	Sample Size	Sample Period	APE <sup>a</sup>	z-statistic (t-statistic)
I. Public Offerings					
Mikkelson and Partch (1986)	Equity	47	1972-82	-4.36	-9.43 <sup>c</sup>
Masulis and Kowar (1986)	Equity	388	1963-80	-3.25	(-11.27) <sup>c</sup>
Asquith and Mullins (1986)	Equity	128	1963-81	-3.00	(-12.50) <sup>c</sup>
Eckbo (1986)	Debt	459	1964-81	-0.06	-0.44
Mikkelson and Partch (1986)	Debt	111	1972-82	0.06	0.57
Dan and Mikkelson (1984)	Debt	150	1970-79	-0.37	(-1.76) <sup>c</sup>
Eckbo (1986)	Convertible Debt	75	1964-81	-1.25	-4.60 <sup>c</sup>
Mikkelson and Partch (1986)	Convertible Debt	23	1972-82	-1.39	-3.19 <sup>c</sup>
Dan and Mikkelson (1984)	Convertible Debt	132	1970-79	-2.31	(-7.70) <sup>c</sup>
II. Public Utility Offerings <sup>b</sup>					
Masulis and Kowar (1986)	Equity	584	1963-80	-0.68	-24.20 <sup>c</sup>
Asquith and Mullins (1986)	Equity	264	1963-81	-0.90	(-7.80) <sup>c</sup>
Eckbo (1986)	Equity	86	1964-81	-0.50	-2.20 <sup>d</sup>

<sup>a</sup>The abnormal return is calculated for the window (-1,0) unless otherwise specified.

<sup>b</sup>According to Smith (1986), virtually no convertible bonds are issued by utilities.

<sup>c</sup>Significant at the .01 level.

<sup>d</sup>Significant at the .05 level.

<sup>e</sup>Significant at the .10 level.



TABLE II

## ABNORMAL RETURNS FOR BANK LOANS, COMMERCIAL PAPER OFFERINGS AND PRIVATE PLACEMENT

Author	Type of Issue	Sample Size	Sample Period	APE <sup>a</sup>	z-statistic (t-statistic)
I. Bank Loans					
Lumner and McConnell (1989)	Loans	728	1976-86	0.61	2.69 <sup>d</sup>
James (1987)	Loans	80	1974-83	1.93	3.96 <sup>d</sup>
II. Commercial Paper Offerings					
Slovin et al. (1988)	NIF	35	1982-85	1.39	2.36 <sup>d</sup>
Slovin et al. (1988)	Non-NIF	73	1982-85	0.12	0.40
III. Private Placements					
Wruck (1989)	Equity	99	1979-85	1.89	1.91 <sup>e</sup>
James (1987)	Debt	37	1974-83	-0.91	-1.87
Mikkelson and Partch (1986)	Debt	57	1972-82	-0.36	-0.57 <sup>d</sup>
Fields and Mais (1991)	Convertible Debt	61	1970-87	1.80	2.20 <sup>d</sup>
IV. Private Placements by Utilities					
Szewczyk and Varma (1991)	Debt	293	1963-86	0.539	3.04 <sup>c</sup>

<sup>a</sup>The abnormal return is calculated for the window (-1,0) unless otherwise specified.

<sup>b</sup>Wruck (1989) found an excess return of 4.41% for the window (-3,0).

<sup>c</sup>Significant at the .01 level.

<sup>d</sup>Significant at the .05 level.

<sup>e</sup>Significant at the .10 level.

<sup>f</sup>Szewczyk and Varma excess return was calculated for the window (-2,+2).

that borrowers are in compliance with the requirements of a loan agreement. Banks also are given access to private information about borrowing firms that is not otherwise made publicly available and then make loan decisions based upon this private information. Therefore, banks can be seen as evaluating the borrowing firm's securities based upon private information. Banks also have an incentive to protect confidential information regarding borrowing firms. Since banks provide funds to many different borrowing firms and have the opportunity for repeat business, banks have reputational capital at stake. Therefore, banks provide the benefits of producing reliable information about borrowing firms, protecting confidential information, and providing valuable monitoring services.

If the capital market perceives that bank loans help reduce information asymmetries associated with public offerings of debt, one would expect a positive stock price response to be associated with announcements of bank loans. James (1987) examined the stock price response associated with announcements of bank loans and public offerings of debt utilizing standard event study methodology. He found a significantly positive excess return associated with announcements of bank loans. In contrast, a non-positive stock price response was found to be associated with announcements of public offerings of debt.

The positive stock price response associated with announcements of bank loans provides testable implications regarding the benefits associated with financial intermediation. For instance, if the positive excess return associated with bank loans is a result of decisions based upon private information, one would expect a similar response to be associated with other types of debt offerings where the lender is given access to private information regarding the borrowing firm. However, James (1987) found a negative excess return associated with announcements of private placements of debt. These results are similar to the findings of Mikkelson and Partch (1986) regarding private placements of debt. James (1987) also examined the hypothesis that the difference in the excess return among announcements of bank loans, private placements of debt and straight debt offerings arise because the debt offerings differ systematically in some important feature that is unrelated to the lender, such as the risk of the issue, the size of the debt issue or the maturity of the issue. However, using event study methodology and cross-sectional regression analysis he found that the stock price response associated with bank loans, private placements, and public debt issues were unrelated to these factors. Based upon this, James (1987) concludes that banks provide some special

service associated with their lending activity that is not available from other lenders. In other words, bank loans are unique. This conclusion relies much on the work of Fama (1985) who also suggests that banks play a unique role in providing funds to borrowing firms.

In addition to decisions based upon private information, Fama (1985) states that the credibility of the signal associated with bank decisions is particularly enhanced given the short-term nature of bank loans. Bank loans typically have shorter maturities than other financing sources (Mikkelson and Partch, 1986; and James, 1987). Borrowing firms which utilize short-term bank loans for their financing needs subject themselves to periodic review and evaluation when loans are renewed. Therefore the decision by the borrowing firm to use bank financing reflects a choice by the firm to utilize a reputable outsider, such as a bank, to periodically monitor their activities. Fama (1985) also suggests that bank loans are useful to avoid duplication of information costs incurred by other creditors of the firm. Given the periodic review process associated with short term bank loans, positive renewal signals from bank loans indicate that other creditors of the firm do not need to undertake similar costly evaluations of the borrowing firm, thereby avoiding duplication of monitoring costs.

It should be noted that the Fama (1985) argument regarding the uniqueness of bank loans places considerable emphasis on the loan renewal process as a mechanism for transmitting information in capital markets. In a related context, Lummer and McConnell (1989) suggest that loan renewals provide information regarding the borrowing firm to the capital market. Given the short-term nature of bank loans, borrowing firms which utilize banks for their financing needs must submit themselves to periodic review in order to renew credit agreements. According to Lummer and McConnell (1989), banks have an information advantage over other capital market participants as a result of a continued working relationship with the borrowing firm. In other words, banks produce reliable information regarding borrowing firms as a natural outgrowth of their business relationship, which is developed over time. Lummer and McConnell (1989) suggest that if there is a positive stock price response associated with bank loans, it should occur at the announcement of revisions to existing bank loans rather than at the initiation of a new bank loan agreement.

In order to test the hypothesis that loan renewals provide information to the capital market, Lummer and McConnell (1989) examined the stock price response associated with announcements of new bank loans and announcements of loan renewals. By making this distinction,

they hope to provide evidence as to whether banks have an information advantage at the outset of the credit agreement or whether this advantage develops over time as the result of a continuing working relationship with the borrowing firm. They found a positive excess return associated with announcements of revisions to existing credit agreements, where the terms of the credit agreement were revised favorably. However, they found that announcements of new credit agreements resulted in an excess return that was not significantly different from zero. Lummer and McConnell (1989) conclude that decisions by banks send a credible signal to the market as a result of a continuing working relationship with borrowing firms, which is developed over time. This result indicates that the loan renewal process is a credible mechanism for signalling the credit worthiness of firms which utilize banks for their financing needs.

In a related context, Slovin, Sushka, and Hudson (1988) examined the role of bank participation in commercial paper programs. Most commercial paper issuers obtain a line of credit from a bank which provides the firm with an alternative source of liquidity in the event that the commercial paper market becomes unavailable. These lines of credit are usually revocable and allow the bank to withdraw from its commitment if the situation warrants. In some

instances, commercial paper issues are backed by irrevocable standby letters of credit or note issuance facilities in which the bank guarantees the funds to the security holder even if the issuer enters into bankruptcy. In effect, the credit risk of the issuer is assumed by the bank and the bank can be viewed as the ultimate guarantor for the issue.

Slovin, Sushka, and Hudson (1988) found that announcements of commercial paper programs with irrevocable standby letters of credit or note issuance facilities result in a significantly positive stock price response. However, the wealth impact associated with other types of commercial paper issues without this type of backing is not significant. They suggest that the bank's credibility and reputation provides a quality certification service for commercial paper issues backed by irrevocable standby letters of credit or note issuance facilities. The commercial paper issuer pays the bank for this service and provides the bank with private information that is not available to other market participants so that the bank may adequately provide this certification service. Therefore, commercial paper issues backed by irrevocable standby letters of credit or note issuance facilities indicates that the bank, after evaluating the private information provided by the borrowing firm, is willing to risk its reputational capital, thus sending a positive signal to the market.

In summary, studies have shown that a positive stock price response is associated with announcements of bank loans and bank participation in commercial paper offerings, whereas there is a negative response associated with public offerings of securities. These results provide support for the hypothesis that financial intermediaries, such as banks, help reduce information asymmetries associated with public offerings. If this benefit is the result of factors inherent in the intermediation process, such as decision by financial intermediaries based upon private information or increased monitoring activities, one would expect a similar positive response to be associated with other types of security offerings where intermediaries are given access to private information and/or perform monitoring activities.

#### Empirical Studies: Investment Bankers

Investment banking firms generate substantial amounts of revenue underwriting many different types of securities issuances with various types of borrowing firms. As a result, investment bankers develop a reputation over time and earn a return based upon their reputation. Since an investment banker has reputational capital at stake, an investment banker that does not protect confidential information or produces unreliable information will lose



customers (Beatty and Ritter, 1986). Not only is there an incentive for investment bankers to maintain confidential information, there is also an incentive for them to produce reliable information regarding borrowing firms.

Booth and Smith (1986), Beatty and Ritter (1986), and Hughes (1986) propose that investment bankers also help to reduce information asymmetries associated with security offerings. As a part of the underwriting process investment bankers are given access to private information regarding the borrowing firm that is not otherwise made publicly available. Since investment bankers have an incentive to produce reliable information, investment bankers help certify that the issue price is consistent with private information, thus helping to reduce information asymmetries. Therefore, investment bankers can be seen as providing a valuable certification role in capital markets.

In a related context, Slovin, Sushka, and Hudson (1990) provide empirical support regarding the impact of underwriter certification on firm value. They suggest that the more valuable the reputation of the investment banker, the greater the value of the certification service they provide. In other words, more prestigious investment bankers provide more valuable underwriting services relative to other investment bankers. Previous studies, such as Mikkelsen and Partch (1986) and Masulis and Kowar (1986),

have shown a significantly negative excess return to be associated with public offerings of equity. However, Slovin, Sushka and Hudson (1990) suggest that utilization of more prestigious investment bankers may result in a less negative stock price reaction to the announcement of a seasoned equity offering.

Slovin, Sushka and Hudson (1990) partitioned their sample into four categories: (1) firms which utilized a special category underwriter, which includes the most prestigious investment banking firms, (2) borrowers which utilized national underwriters, (3) firms which used a regional investment banking firms, and (4) the investment banking firm utilized was a local underwriter. The Special category is based upon the fact that within the investment banking industry a small set of prestigious firms dominate the industry (Hayes, 1979). Six firms which underwrite over two thirds of all equity issues comprise the Special category: Salomon Brothers, Inc., Goldman Sachs & Co., Morgan Stanley, Merrill Lynch, Shearson Lehman, and First Boston Corp. They found that announcements by borrowing firms which employed one of these six firms to underwrite the offering resulted in a significantly less negative stock price responses than announcements made by firms which utilized the other investment banker categories.

These results were further supported by regression analysis. Excess returns were regressed on dummy variables representing the prestige of the investment banker. The

coefficient on the dummy variable for the special category was found to be the most significant. The pattern of the coefficients for each category supports the hypothesis that underwriters with less prestigious reputations result in a more negative excess return. Therefore, Slovin, Sushka, and Hudson (1990) conclude that more prestigious investment bankers provide more valuable certification services.

Hansen and Torregrosa (1992) suggest that in addition to certification services, investment banking firms also monitor borrowing firms. Monitoring in this context is defined as investigating the borrowing firms in order to provide information about managerial effort and the firm's internal assessment mechanisms. Easterbrook (1984) suggests that investment bankers which monitor borrowing firms on the behalf of stockholders increase firm value because monitoring by an investment banker overcomes the free-rider problem associated with monitoring by individual stockholders. As discussed previously, investment bankers have reputational capital at stake when certifying that the issue price is consistent with public and private information. The monitoring role of investment bankers, which also puts the reputation of the investment banker at risk, involves investigating the borrowing firm with the purpose of improving performance, which in turn raises the stock price. Therefore, Hansen and Torregrosa (1992) argue that investment banking firms provide valuable monitoring and certification services associated with security issues.

## Privately Placed Securities

As an alternative to public offerings of securities or bank loans, firms may utilize a private placement offering for their financing needs. A private placement of debt usually involves the sale of securities to a single or small group of financial intermediaries, such as insurance companies, pension funds and financial firms. Privately placed securities are exempt from the registration and disclosure requirements associated with public security offerings. Section 4(2) of the Securities Act of 1933 permits the unregistered sale of securities to a limited number of "sophisticated" lenders. The assumption here is that "sophisticated" lenders have the capacity to thoroughly investigate the merits of the security issue without monitoring by the Securities and Exchange Commission (SEC).

The private placement market experienced tremendous growth during the 1980's. Table III presents descriptive statistics regarding the growth of the private placement market. Total private placements grew rapidly from \$15.7 billion in 1980 to \$165.4 billion in 1989 for an annualized yearly growth rate of 22.6%. Debt issues comprised the largest percentage of total privately placed securities (over 85% on average). Thus, the tremendous growth in this market is largely attributable to the growth of private placements of debt.

There are several reasons noted in the literature for the rapid growth of the private placement market. Private

TABLE III  
DESCRIPTIVE STATISTICS FOR PRIVATE PLACEMENTS OF DEBT

Year	Private Placements (Billions)	Percentage of Total Financing	Percentage Debt of Total Placements
1980	\$ 15.7	22	88
1981	18.4	25	87
1982	24.3	28	85
1983	35.6	27	81
1984	53.2	39	82
1985	73.1	35	83
1986	123.5	30	90
1987	139.4	34	88
1988	145.1	37	85
1989	165.4	35	82
1990	120.6	28	86

placement are less costly and can be completed in a shorter time period than corresponding public issues. The rapid growth of leveraged buyouts (LBO's), the use of junk bond financing, and the tremendous growth in the number of mergers during the 1980's also contributed to the growth of the private placement market (Maher and Sommar, 1990). A more detailed comparison of the similarities and differences between private placements, bank loans, and public debt offerings is provided in the next section. In addition, the role of investment bankers in both public offerings and private placements will be examined.

#### Comparison of Public and Private Offerings

Private placements of debt take significantly less time to complete and have lower floatation costs relative to public offerings of debt. Borrowing firms obtain funds more quickly through private placements of debt because registration of the issue is not required by the SEC. This also contributes to lower floatation costs in private placements of debt. In a public debt offering, the borrowing firm must pay legal and printing fees associated with SEC registration.

Investment bankers perform different roles in private placements of debt and public debt offerings which further contributes to higher floatation costs associated with public debt issues. In a public offering, the investment banker provides a variety of origination services, such as

preparation of the prospectus, preselling activities associated with demand estimates, and advice regarding the structure of the issue. The investment banker usually performs an underwriting function in public offerings, where the investment banker or its syndicate purchases the security issue from the borrowing firm. The investment banker then distributes the securities to investors, hopefully at a price greater than it cost the investment banker to purchase the new issue from the borrowing firm. As a result, the investment banker assumes the risk of selling the security at a higher price. However, investment bankers in private placements of debt do not underwrite the issue. The investment banker serves as a broker in the private placement process bringing borrowing firms and prospective lenders together (Blackwell and Kidwell, 1988). The investment banker may also provide advice regarding the structure of the issue and comparative conditions in the private placement process. However, many borrowing firms do not utilize an investment banker during the private placement process, but work directly with potential investors. As a result of these factors, floatation costs in private placements of debt are minimal in comparison to public debt offerings.

Booth and Smith (1986), Beatty and Ritter (1986), and Hughes (1986) suggest that investment bankers have developed a reputation associated with the services they provide in security offerings and earn a return based upon this

reputation. Slovin, Sushka, and Hudson (1990) found that the more prestigious the reputation of the investment banker, the more valuable the services they provide. Although investment bankers perform different roles in private placements and public debt offerings, the market may perceive investment bankers to be providing monitoring and certification services in private placements similar to those associated with public offerings. Therefore, we would also expect the more prestigious the reputation of the investment banker the more valuable the services they provide in private placements of debt.

In a public offering of debt, financial information about the borrowing firm is submitted to the SEC and is a matter of public record. Since private placements of debt are exempt from the registration and disclosure requirements of the SEC, information about the financial prospects of the borrowing firm are not necessarily made publicly available. However, during the private placement process, lenders utilize publically available information and private information supplied by the borrowing firm in order to evaluate the credit worthiness of the borrowing firm. Lenders in private placements of debt can be seen as evaluating the borrowing firm based upon private information. In a related context, private placements offer the borrowing firm financial flexibility since the terms of the issue may be tailored to meet their specific needs. For example firms do not necessarily have to take the approved



funds all at once. Borrowing firms can pay a commitment fee to the lender and "draw down" against the approved funds as needed (Martin, Petty, Keown, and Scott, 1991). This provides financial flexibility, because the firm does not have to borrow the funds if the need does not arise.

Private placements of debt often have more restrictive covenants than public debt offerings (Smith and Warner, 1979). As was discussed above, during the process of negotiating the private placements of debt, lenders are given access to information that is not necessarily publicly available. Covenants can thus be written that address special concerns of lenders. Renegotiation provisions are also more frequently included and exercised in private placements than in public debt issues (Smith and Warner, 1979). If a borrowing firm wants to change specific covenants associated with a public debt offering, typically two-thirds of the holders of the principal amount of the debt issue must approve the covenant modification. In addition, changes to the maturity or the principal amount of the debt issue requires the approval of 100% of the holders of the debt issue. Although modifications of the terms in private placements of debt also requires 100% lender approval, there are fewer participating lenders in private placements of debt. Approval of changes pertaining to the terms of the issue or covenant stipulations requires negotiations with a smaller group of lenders and is much easier to obtain. Zinberg (1975) reports that unless there

is some material change in the risk or financial position of borrowing firms, lenders in private placements of debt typically approve modifications to covenant provisions requested by borrowing firms.

### Comparison of Bank Loans and Insurance

#### Companies as Lenders

Another alternative to private placements of debt are bank loans. Banks are financial intermediaries that accept funds from depositors, loan funds to borrowers, and monitor the activities of the borrowers during the loan. James (1987) and Lummer and McConnell (1989) suggest that banks have developed a reputation of providing effective lending decisions which the market views as a signal of the credit worthiness of the borrowing firm. Insurance companies are the primary lenders in private placements of debt. Maher (1989) suggests that insurance companies have developed a reputation of being experts at credit evaluation in the private placement market. Insurance companies are financial intermediaries which use the premiums paid by customers to invest in assets such as stocks and bonds. Insurance companies then use the earnings from these assets to pay out claims on their customers' policies.

Banks utilize both publicly available information and private information in order to determine the credit worthiness of borrowing firms. Completion of the bank financing agreement indicates the bank's willingness to risk

reputational capital by lending to the borrowing firm. Announcements of bank loans can be viewed by the market as a signal which helps alleviate information asymmetries which exist regarding the future prospects of the borrowing firm. During the private placement process, insurance companies are given access to information about borrowing firms that is not necessarily made publicly available. As a result, insurance companies evaluate the firm on the basis of private information. Insurance companies, as lenders in private placements, perform a quality certification service from which other market participants may infer positive information about the borrowing firm's prospects.

Banks provide monitoring of the borrowing firm's activities which helps to reduce agency costs. Diamond (1984) suggests that monitoring of private information is most efficiently delegated to financial intermediaries, rather than being collected by individual investors. Otherwise, there is duplication of monitoring costs or, alternatively, the free rider problem. Banks utilize both public and private information during the credit evaluation process in order to condition loan covenants. Banks provide delegated monitoring of the activities of the borrowing firm during the life of the loan.

We hypothesize that in private placements of debt, insurance companies, acting as a delegated monitor, also provide valuable monitoring of the borrowing firm's activities. Insurance companies are given access to private

information about the borrowing firm during the personal negotiating process associated with private placements of debt, and then condition the covenants of the debt issue on the basis of this private information. Insurance companies then monitor the activities of the borrowing firm throughout the life of the debt contract.

In general, bank loans typically have shorter maturities than private placements of debt. Given the short-term nature of bank loans, borrowing firms which utilize banks for their financing needs subject themselves to periodic review and evaluations when loans are renewed. Banks are given access to private information about borrowing firms over time as a result of the loan renewal process and through the bank's monitoring of the borrowing firm's activities. Renewals to short-term bank loans indicate a bank's willingness to continue providing funds and to continue risking reputational capital, sending a positive signal to the capital market.

Insurance companies are also given access to private information about borrowing firms over time, however, private placements are generally not renewed. Although insurance companies do not have the same degree of recourse as banks, they do have some recourse over the life of the debt contract. Since private placements have restrictive covenants, modification to existing covenants must be approved by the lender, thus providing insurance companies with some recourse. Insurance companies have the potential

to purchase shares of common stock in the borrowing firm utilizing their voting rights attached to the common stock to affect the firm's decision making during the term of the debt contract. Rajan (1992) suggests that equity ownership can provide recourse similar to the renewal process associated with short-term bank loans.

To summarize, there are many similarities between the bank lending process and insurance companies as lenders in private placements of debt. Banks have developed a reputation of providing effective quality certification and monitoring services associated with their lending activities. Maher (1989) suggests insurance companies have developed a reputation of being experts at credit evaluation in the private placement debt market. Insurance companies evaluate the borrowing firm on the basis of private information and monitor the activities of the firm throughout the life of the bond contract. Given the short-term nature of bank loans, the renewal process provides banks with recourse. In a similar manner, the ability of insurance companies to purchase common stock of the firm and approve modifications to restrictive covenants provides them with a similar mechanism of recourse in private placements.

James (1987) and Lummer and McConnell (1989) found a positive stock price response for announcements of new bank loans and renewals to existing bank loans respectively. These studies suggest that the benefits associated with bank lending provides positive information to the market about

the borrowing firm. We hypothesize that the market views an insurance company in a private placement of debt to be performing the same functions as a bank in the bank lending process such that we would expect a positive stock price response to be associated with announcements of private placements of debt where the lender is an insurance company.

#### Empirical Studies: Private Placements

The capital market response associated with announcements of private offerings have not been examined in the literature to the same extent as public offerings. However, several studies have focused on the wealth impact of announcements of private placements of various types of security issuances. The results of these studies are in sharp contrast to the findings of previous studies regarding public offerings of the same type of security.

The stock price response associated with announcements of private placements of equity was examined by Wruck (1989). In a private placement of equity, the firm sells a block of equity to a select group of investors. In most cases, fewer than five investors are involved in the private equity offering. She found a significantly positive excess return associated with private placements of equity. This is in sharp contrast to the negative excess return for public equity offerings found by Masulis and Korwar (1986), Mikkelsen and Partch (1986), and Asquith and Mullins (1986).

Wruck (1989) suggests that the positive response associated with private equity offerings is a result of reduced information asymmetries. Given the personal negotiating process involved in private placements of equity, Wruck (1989) suggests that managers can more effectively convey private information to individual buyers regarding the future prospects of the firm. Consequently purchasers of the firm's equity provide a quality certification service, thus providing positive information to the market about the borrowing firm.

Wruck (1989) also suggests that there is a positive relationship between the excess return associated with private equity offerings and the change in ownership concentration resulting from the equity offering. Private equity offerings establish new equity blockholders resulting in a shift in ownership concentration. The impact of the change in ownership concentration depends on the market's perception of the effect the change will have on firm value. If the change in ownership concentration is expected to more closely align manager and shareholder interests, a positive response would be expected to be associated with the private equity offering (Jensen and Meckling, 1976).

Utilizing cross sectional regression analysis, the relationship between the excess return associated with private equity offerings and changes in ownership concentration was examined (where ownership concentration was defined as the percentage holdings of the largest

shareholders as reported in proxy statements). She found that there was a significant positive relationship between the change in firm value and the change in ownership concentration resulting from the private equity offering. Therefore, Wruck (1989) concludes that increased ownership concentration resulting from private equity offerings has a positive impact on firm value.

This result has implications regarding increased monitoring resulting from private placements of equity. As was noted above, changes in ownership concentration creates new blockholders of the firm's securities. Large blockholders have a greater incentive to engage in monitoring activities because their proportional claim on any resulting increase in firm value may outweigh the costs they incur monitoring. The positive stock price response associated with private placements of equity could be a result of increased monitoring by large blockholders.

Fields and Mais (1991) examined the stock price response resulting from announcements of private placements of convertible debt. As noted by Wruck (1989), private placements of equity often result in the creation of outside blockholders who have an incentive to perform monitoring activities. In a related context, Fields and Mais (1991) suggest that private placements of convertible debt may result in increased monitoring since upon conversion blockholders can use their voting rights to influence the management of the borrowing firm. Through the personal



negotiating process associated with the private placement market, lenders participating in private placements of convertible debt are given access to information regarding borrowing firms that is not necessarily made available to public security holders, thus helping to reduce information asymmetries.

They found a positive, statistically significant stock price response associated with announcements of private placements of convertible debt. This is in sharp contrast to the negative response associated with public issues of convertible debt noted by Mikkelson and Partch (1986), Eckbo (1986) and Dann and Mikkelson (1984). These results suggest that private placements of convertible debt convey positive information regarding the borrowing firm to the capital market. Through regression analysis, Fields and Mais (1991) found that there was a significantly positive relationship between the stock price response associated with private placements of convertible debt and the relative size of the issue (issue size/market value of equity). Since private placements are typically to a small group of "sophisticated" investors, Fields and Mais (1991) argue that these results provide support for the hypothesis that private placements of convertible debt provides positive information to the market about the firm. The positive relationship between the relative size of the issue and the excess return indicates that the firm's ability to place a relatively large convertible debt issue may convey more favorable

information to the market, since larger debt issues result in a large block of new shareholders created upon conversion.

Szewczyk and Varma (1991) examined the capital market's response to announcements of private placements of debt where the borrowing firm was a public utility company. They suggest that investors infer positive information regarding the borrowing firm from the completion of a private placement of debt for the following reasons:

- (1) information asymmetries are reduced as a result of the personal negotiating process involved in the private placement agreement;
- (2) lenders in the private placement market provide a quality certification role demonstrated by their willingness to purchase the firm's securities, and
- (3) through the establishment of blockholders, private placements result in a closer monitoring of the firm.

They found a significantly positive excess return associated with announcements of private placements of public utility debt, which is in sharp contrast to the negative stock price response associated with public offerings of debt where the borrowing firm was a public utility found by Eckbo (1986). These results provide support for the argument that investors infer positive information as a result of the completion of the private placement of debt. Through regression analysis, Szewczyk and Varma (1991) found a significantly positive relationship between the excess return associated with announcements of

private placements of debt and the relative size of the debt issue. They suggest that the ability of a firm to privately place a relatively large debt issue may provide a positive signal to the extent that it reflects a willingness of lenders to make a larger commitment of funds.

Extending the results of Szewczyk and Varma (1991) for private placements of debt by utilities to private placements for all types of borrowing firms may be problematic. Utilities are regulated, whereas industrial firms are not. Regulation may help reduce information asymmetries associated with security offerings by utilities. Asquith and Mullins (1986) and Masulis and Kowar (1986) found that the excess returns associated with security issues by industrial firms are more negative than those for utilities. Mikkelsen and Partch (1986) and James (1987) found a non-positive response for announcements of private placements of debt for a random sample of industrial firms, but Szewczyk and Varma (1991) found a positive, statistically significant excess return for private placements of debt by utilities. These results suggest that regulation rather than the certification and monitoring role of lenders may help reduce information asymmetries for security offerings by utility or financial borrowing firms.

#### Hypotheses Statements

Empirical studies document a non-positive stock price response associated with public debt offerings. One

possible explanation for this response is information asymmetries which exist in public security markets. Borrowing firms possess superior information regarding the true value of their firm's future earning prospects. Prospective investors would benefit from the knowledge of the true value of these projects, but dissemination of credible information in public security offerings is costly, particularly when there are numerous investors. In addition to information asymmetry problems, it is costly for lenders to monitor the borrowing firm. Considerable resources would be expended for numerous lenders in public debt offerings to individually monitor the firm's activities to determine compliance with the terms of the financing agreement.

James (1987) found that announcements of banks loans result in a favorable stock price response. He suggests that borrowing firms which utilize bank loans for their financing needs provide positive information to the market as a results of the benefits associated with the bank lending process. Lummer and McConnell (1989) suggest that the loan renewal process associated with short-term bank loans is a reliable mechanism for signalling the credit worthiness of borrowing firms to the capital market. The results of these studies provides support for the following benefits associated with the bank lending process:

- (1) decisions based upon private information help to alleviate information asymmetries;
- (2) monitoring by a reputable lender helps to reduce agency costs;
- and (3) the short-term renewal process provides banks with recourse.

Previous studies which have examined the stock price response associated with announcements of private placements of debt have found mixed results. Mikkelson and Partch (1986) and James (1987) found a non-positive, insignificant stock response associated with announcements of private placements of debt made by industrial firms. However, the emphasis of these studies was on public offerings and bank loans respectively and they did not explore any cross-sectional variation in their sample of private placements. Szewczyk and Varma (1991) found a significant positive abnormal return associated with announcements of private placements of debt where the issuing firm was a public utility. They suggest that borrowing firms may use private placements of debt to provide a positive signal about their true value. However, Asquith and Mullins (1986) and Masulis and Korwar (1986) suggest that utility regulation may help to reduce information asymmetries associated with utility security offerings, thereby resulting in a favorable stock price response. Utility regulation, rather than the benefits associated with private placements of debt, may mitigate information asymmetry problems associated with utility security offerings.

We hypothesize that borrowing firms which place debt privately with insurance companies provide the market with a credible signal of their true value. Insurance companies, as lenders in private placements of debt, provide benefits similar to banks in the bank lending process. We argue that

insurance companies have developed a reputation of providing effective monitoring and certification services in the private placement market, similar to those associated with bank loans. Insurance companies also have recourse, much like the renewal process associated with short-term bank loans, through their ability to purchase the common stock of the borrowing firm and to approve modifications to restrictive covenants. Since insurance companies provide benefits similar to those associated with the bank lending process, we would expect a positive stock price response to be associated with private placements of debt where an insurance company is the lender.

Before examining this hypothesis, we first want to determine the wealth impact associated with announcements of private placements of debt where the lender is specified. Identification of the lender in the private placement announcement may provide positive information about the value of the borrowing firm to the capital market, particularly given the confidential nature of the private placement market. According to SEC regulations, borrowing firms are not required to make publically available any information pertaining to the private placement of debt, including the identity of the lender participating in the private placement. We suggest that high quality borrowing firms may signal their true value to the market by placing debt privately with reputable lenders. Lenders in private placements of debt are given access to private information

about borrowing firms during the credit evaluation and negotiation process. Completion of the private placement indicates that on the basis of their evaluation of private information, a specified lender is willing to provide capital to the borrowing firm, thereby indicating their confidence in the future prospects of the borrowing firm.

Private placements of debt are typically to a small number of lenders, thereby establishing new blockholders of a firm's securities. These lenders condition covenants based on private information supplied by the borrowing firm and monitor the firm's activities during the life of the loan. A small number of lenders risking their reputational capital in a private debt placement have a greater incentive to include strict covenants and perform monitoring activities than do numerous lenders in public debt offerings. Positive excess returns associated with announcements of private placements of debt where the lender is specified would be consistent with the argument that there is effective monitoring in private debt placements.

The primary hypotheses of this study revolve around the role of insurance companies as credible monitors in private placements of debt. Insurance companies are the primary lenders in the private placement market. Debt comprises the largest component of their asset portfolio. They have developed a reputation of providing expert credit evaluation in this market. Insurance companies may also purchase shares of the borrowing firm's stock over the life of the

bond contract. This provides insurance companies with a mechanism of recourse similar to the loan renewal process of bank loans. High quality borrowing firms may signal their true value by privately placing debt with a credible monitor, such as an insurance company.

We will also examine the wealth impact associated with other lenders in private placements of debt, such as pension funds, banks, and other institutional investors. These other lenders in private placements of debt may not be able to purchase common stock or face restrictions on the amount of stock they may include in their asset portfolio. In this case, these lenders will not have the same degree of recourse, nor have they developed the same reputation as insurance companies in the private placement market. Although we have discussed the benefits associated with the bank lending process, the number of private placements in our sample where a bank is the primary lenders is small. Thus, we will be unable to make statistical inferences regarding the wealth impact of banks as lenders in the private placement market. As a result of these factors, we would not expect statistically significant stock price responses for these lender categories.

The stock price response associated with announcements of private placements of debt where the lender is specified may be related to the type of investment banking firm participating in the private placement. Private placements of debt are sometimes arranged directly between borrower and



lender without the assistance of an investment banker. However, in some instances borrowing firms will utilize an investment banker to provide advice during the private placement process. Investment bankers in private placements help bring together borrowing firms and prospective investors. Although the terms of the issue are not necessarily made publicly available, the market may perceive investment bankers to be providing certification and monitoring services in private placements similar to those associated with public offerings. Since investment bankers have reputational capital at stake, they have an incentive to ensure that the terms of the issue are consistent with private information. Hansen and Torregrosa (1992) suggest that investment bankers also have reputational capital associated with their monitoring service, where monitoring requires investigating the borrowing firm with the objective of improving share value. In a related context, Slovin, Sushka and Hudson (1990) suggest that the greater the reputation of the investment banking firm, the more effective the monitoring and certification services. They found that firms with equity issuances underwritten by the special category of more prestigious investment bankers had a significantly less negative stock price response than firms utilizing the services of other investment banking firms. Based upon this result they suggest that the more valuable the reputation of the investment banker, the greater the value of the

certification and monitoring services they provide. If more prestigious investment banking firms are perceived by the capital market as providing more valuable certification and monitoring services, then utilization of prestigious investment banking firms in the private placement process would have a favorable impact on firm value.

As noted by Wruck (1989), Szeczyk and Varma (1991) and Fields and Mais (1991), in many instances there is more than one lender participating in a single private placement of debt. The stock price response associated with announcements of private placements of debt may be related to the number of lenders participating in the private placement. Private placements which specify multiple lenders indicate that the borrowing firm may have provided firm specific information to more than one lender. As a result, completion of the private placement indicates that more than one lender is willing to provide capital to the borrowing firm, thus providing a signal of their confidence in the future prospects of the borrowing firm. Moreover, a positive excess return associated with private placements of debt which specify more than one lender would be consistent with the argument that there is increased monitoring as a result of the private placement since more than one lender will be performing monitoring activities.

However, as more lenders participate in private placements of debt, private information regarding the borrowing firm is revealed to more lenders, thus diminishing

the advantage of privacy of information associated with the private placement market. Since several lenders are performing monitoring there may ultimately be duplication of monitoring efforts and costs. There is also an incentive for a lender to free ride on the monitoring activities of the other lenders in a private placement of debt. This study will examine the wealth impact associated with announcements of private placements which specify multiple lenders. Moreover, in order to further investigate the role of insurance companies in private placements of debt to multiple lenders, we will examine the stock price response associated with multiple lenders in which the lenders are all insurance companies in comparison to private placements to multiple lenders which are not insurance companies. Given the benefits associated with reputable lenders in private placements and the potential costs for multiple lenders, we would expect the market to view the reputation of the lender to be more important than the number of lenders participating in a private placement of debt.

We hypothesize that announcements of private placements of debt to a reputable lender, such as an insurance company, will result in a positive stock price response. However, the magnitude of this stock price response will vary across firms. Cross-sectional regression analysis will be used to examine this differential stock price response. Differences in the stock price response among announcements of private placements of debt where the lender is specified may result

because of the following factors: (1) the size of the debt issue as well as the size of the borrowing firm; (2) the maturity of the debt issue; and (3) the risk associated with the borrowing firm raising capital.

Private placements of debt establish new blockholders of the firm's securities, particularly since private placements are generally to a small number of lenders. Larger blockholders in private placements of debt have greater incentive to engage in monitoring activities than numerous lenders in public debt offerings because the benefits they receive as a result of monitoring may outweigh the costs they incur. The ability of a borrowing firm to privately place a relatively large debt issue in relation to the size of the borrowing firm may provide positive information to the capital market to the extent that it reflects the willingness of lenders to make a larger commitment of financing. Thus, we would expect a positive relationship to be associated with the size of the debt issue and the stock price response resulting from announcements of private placements of debt.

The maturity of the debt issue may also contribute to the stock price response associated with private placements of debt. Easterbrook (1984) and Fama (1985) suggest that borrowing firms that issue short-term debt subject themselves to periodic evaluation during the loan renewal process. A firm's decision to commit to periodic evaluation by a reputable monitor may provide a signal regarding

management's assessment of the true value of the borrowing firm. This would indicate that the maturity of the issue and the excess return associated with announcements of private placements of debt would be negatively related. As discussed previously, private placements of debt have longer maturities than short-term debt, such as bank loans, and are typically not renewed. Rajan (1992) suggests that the lender's ability to purchase common stock provides them with recourse similar to short-term bank debt. To the extent that the lender's ability to purchase common stock during the life of the bond contract substitutes for the positive benefits associated with the short-term loan renewal process, the inverse relationship between the maturity of the debt and the excess return may not hold.

The stock price response associated with announcements of private placements of debt may be related to the risk of the borrowing firm issuing debt. Smith and Warner (1977) argue that private placements contain more restrictive covenants than public debt offerings. One possible explanation for this is that private placements are more likely to be used by riskier firms. As a result, differences in default risk may contribute to the stock price response associated with announcements of private placements of debt. Myers and Majluf (1984) suggest that the stock price response associated with security offerings depends on the type of security issued and the sensitivity of the value of securities to changes in firm value.

Mikkelson and Partch (1986) suggest that one implication of this finding is that announcements of security offerings by borrowing firms which are considered to have low default risk will result in a more positive stock price response. In other words, the greater the risk associated with the borrowing firm, the less positive the stock price response with security issues. As a result, we would expect the magnitude of the excess return associated with announcements of private placements of debt to be inversely related to the riskiness of the borrowing firm.

## CHAPTER III

### METHODOLOGY

#### Introduction

Previous research investigating the announcement period effects of security offerings have utilized event study methodology. The objective of an event study is to analyze the stock price response associated with the introduction of a particular piece of information to the capital market. Event study methodology involves calculation of the excess return associated with an information event, averaging the excess returns associated with the event across all firms included in the sample, and the determination of whether the average excess return associated with the information event is statistically significant. This chapter discusses event study methodology in the context of private placements of debt, as well as providing a description of the method of data collection. A cross-sectional regression model is developed to further analyze the wealth impact of private placements of debt where the lender is specified.

#### Testable Hypotheses

Table IV summarizes each of the five hypotheses specified below. The first hypothesis examines the role of

TABLE IV  
HYPOTHESES STATEMENTS

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- $H_{0,1}$ : There are no abnormal returns associated with announcements of private placements of debt in which the lender is specified.
- $H_{A,1}$ : There are positive abnormal returns associated with announcements of private placements of debt where the lender is specified.
- $H_{0,2}$ : There are no abnormal returns associated with announcements of private placements of debt by industrial and utility borrowing firms.
- $H_{A,2}$ : There are positive abnormal returns associated with announcements of private placements of debt by industrial firms.
- $H_{0,3}$ : There are no abnormal returns associated with announcements of private placements of debt for specified lender categories.
- $H_{A,3}$ : There are positive abnormal returns associated with announcements of private placements of debt where the lender is an insurance company.
- $H_{0,4}$ : There are no abnormal returns associated with private placements of debt which utilize prestigious investment bankers.
- $H_{A,4}$ : There are positive abnormal returns associated with private placements of debt which utilize prestigious investment bankers.
- $H_{0,5}$ : There are no abnormal returns associated with announcements of private placements of debt for multiple lenders.
- $H_{A,5}$ : There are positive abnormal returns associated with announcements of private placements of debt for multiple lenders.
-



lenders in private placements of debt. Lenders are given access to private information about borrowing firms and then make lending decisions on the basis of this private information. Completion of the private placement of debt indicates that the lender is willing to risk its reputational capital by lending to the borrowing firm and the lender will in turn monitor their activities, thus sending a positive signal to the market. This hypothesis will be tested utilizing standard event study methodology. The wealth impact associated with a sample of private placements of debt where the lender is specified will be compared to the wealth impact associated with a sample of private placements where no lender is specified. A larger, positive excess return resulting from announcements of private placements of debt which specify participating lenders would provide support for the argument that private placements of debt where the lender is specified provides positive information to the market about the borrowing firm.

The second hypothesis will examine the impact of utility regulation in private placements of debt where the lender is specified. Szewczyk and Varma (1991) found a positive excess return associated with private placements by utility borrowing firms. Asquith and Mullins (1986) and Masulis and Korwar (1986) suggest that utility regulation helps to reduce information asymmetries associated with security offerings by utility firms. Utility regulation, may help alleviate information asymmetries in private

placements of debt by utility firms. Therefore, the excess return associated with private placements by utility firms will be examined as well as the excess return for industrial firms. If utility regulation rather than the monitoring and certification role of lenders helps reduce information asymmetries associated with utility security offerings, then we would expect that the reputation of the lender does not contribute to the stock price response associated with private placements of debt by utilities. However, a positive stock price response associated with private placements by industrial borrowing firms would be consistent with the hypothesis that the monitoring and certification role of lenders helps reduce information asymmetries, thus providing a positive signal to the market about the value of the borrowing firm.

The next hypothesis will utilize event study methodology to examine the wealth impact of the following lender categories in private placements of debt, where there is only one lender specified in the announcement:

(1) insurance companies; (2) pension funds; (3) financial firms; and (4) other types of institutional investors. If the market perceives that a particular category of lender provides greater certification services and/or provides more effective monitoring relative to other lenders, then a positive stock price response would be expected to be associated with announcements of private placements of debt which specify that type of lender. We suggest that

insurance companies have developed a reputation of providing effective monitoring and certification services in private placements of debt. Insurance companies may also purchase common stock of the borrowing firm. This provides insurance companies with some degree of recourse throughout the life of the loan. Other lenders face restrictions regarding the amount and type of securities they may purchase. Private placements of debt which specify an insurance company as the primary lender may result in a positive excess return as a result of the reputation of insurance companies as lenders in private placements of debt.

Investment banking firms provide valuable monitoring and certification services during the security issuance process. Investment bankers have reputational capital at stake, since they underwrite and advise many different issues over time. If more prestigious investment banking firms are perceived by the capital market as providing more valuable certification and monitoring services, then utilization of prestigious investment banking firms in the private placement process would have a favorable impact on firm value. Event study methodology will be utilized to calculate the stock price response associated with private placements of debt which utilize prestigious investment banking firms to provide advice during the private placement process (Special). The Special category of reputable investment bankers is based upon the idea that within the investment banking firm industry a small set of prestigious

firms dominate the industry (Hayes, 1979). The following investment banking firms will be included in the Special category of investment banking firms: Goldman, Sachs & Co.; First Boston Corp; J. P. Morgan; Salomon Brothers Inc.; Merrill Lynch; and Shearson Lehman. The wealth impact associated with the sample of private placements which utilize prestigious investment banking firms will be compared to a sample of private placements in which no investment banker is specified in the private placement announcement. A larger, positive excess return associated with the Special category of private placements would provide support for the arguments that investment bankers provide valuable monitoring and certification services during the private placement process.

In many instances there is more than one lender participating in a single private placement of debt. The stock price response associated with announcements of private placements of debt may be related to the number of lenders participating in the private placement, since more lenders will be performing monitoring activities and the lenders are risking their reputational capital. However, there is also the possibility of duplication of monitoring costs, as well as the free rider problem for private placements which have more than one participating lender. Event study methodology will be used to calculate the excess return for private placements of debt which specify more than one participating lender. Given the benefits

associated with the monitoring and certification services of reputable lenders in private placements of debt, we hypothesize that the reputation of the lender rather than the number of participating lenders has a greater impact on the stock price response associated with private placements of debt where the lender is specified. Therefore, an insignificant stock price response is expected for private placements of debt which specify more than one lender.

#### Description of the Sample

A sample of 734 announcements of private placements of debt which occurred during the period January 1980 through December 1990 was obtained from Investment Dealer's Digest. In order to be included in the final sample, the announcements of private placements of debt must meet the following criteria: (1) the announcement date of the private placement is in the Wall Street Journal or an unambiguous date of issue is reported in the Investment Dealer's Digest; (2) the common stock of the borrowing company is traded on the New York Stock Exchange or American Stock Exchange at the time of the private placement; (3) the issuing firm has data on the Center for Research in Security Prices (CRSP) Daily Returns file during the year of the announcement of the private placement; and (4) there are no other contemporaneous announcements concerning the borrowing firm reported in the Wall Street Journal two days surrounding the announcement. In 404 cases the identity of

the lender is specified in the private placement announcement. The lender is not specified in 331 private placements announcements. There are 169 announcements in which the borrowing firm utilized a prestigious investment banking firm during the private placement process. The investment banker is not specified in 138 announcements.

There are 186 announcements in which there are multiple lenders. This sample is partitioned into the following groups: (1) in 39 cases the announcement indicates that there are several lenders participating in the private placement, however only one lender is specifically identified in the announcement; (1AND); (2) in 13 instances the announcement indicates that there are several lenders participating in the private placement, however only two lenders are specified in the announcement (2AND); (3) there are 28 announcements which specify only two lenders participating in the private placement (LEND2); (4) there are 29 announcements which identified three lenders as participating in the private placement (LEND3); and (5) in 77 cases there are more than three lenders participating in the private placement of debt (LEND4+). Descriptive statistics for the sample of private placements of debt is presented in Table V.

#### Event Study Methodology

This research will utilize the market model to obtain estimates of abnormal stock price performance associated

TABLE V  
 SAMPLE DESCRIPTIVE STATISTICS FROM THE PERIOD  
 JANUARY 1980 THROUGH DECEMBER 1990

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Panel A: Descriptive statistics for private placements of debt where the lender is specified for a sample of 403 announcements of private placements of debt for the period January 1980 through December 1990.

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Descriptive Measure	Mean	(Range)	Median
1. Issue size (millions)	43.0	(.61 - 1000)	20.0
2. Market Value Common Stock	1557	(4.9 - 48804)	610
3. Relative Size	0.105	(.00001 - 1.7)	0.044
4. Maturity (Years)	11	(1 - 30)	10

Panel B: Descriptive statistics for private placements of debt where the lender is not specified for a sample of 331 announcements of private placements of debt for the period January 1980 through December 1990.

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Descriptive Measure	Mean	(Range)	Median
1. Issue size (millions)	48.6	(.728 - 1000)	24.5
2. Market Value Common Stock	1852	(9.4 - 57126)	456
3. Relative Size	0.136	(.0001 - 1.88)	0.65
4. Maturity (Years)	10	(1 - 30)	10

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with announcements of private placements of debt. The market model is a regression model based on the assumption that there is a linear relationship between the return of any security and the return of a market index. We assume that the slope and intercept coefficients generated by the regression remain constant over the time period investigated. Although the assumptions of the market model are somewhat restrictive, Brown and Warner (1980, 1985) have found that the market model is more powerful in terms of its ability to identify abnormal stock price performance than any of the more complex risk-adjusted models. Moreover, this methodology is consistent with previous empirical studies which utilized event study methodology to measure the excess returns associated with announcements of security issuances. The excess stock return or daily prediction error for firm  $j$  on day  $t$  will be calculated as follows:

$$(1) \quad PE_{jt} = R_{jt} - (\alpha_j + \beta_j R_{mt})$$

where  $R_{jt}$  is the actual rate of return of security  $j$  on day  $t$ , and  $R_{mt}$  is the rate of return on the CRSP equal-weighted market index on day  $t$ . The market model parameters  $\alpha_j$  and  $\beta_j$  are ordinary least squares estimates of the intercept and slope coefficient for firm  $j$  using the market model. The event date is the day which the announcement of the private placement of debt appears in the Investor Dealers Digest. The market model parameters,  $\alpha_j$  and  $\beta_j$  are calculated using returns from an estimation period that runs from day -200 through day -60.



The daily prediction error ( $PE_{jt}$ ) is calculated for each firm from day -59 through day +20. The daily prediction errors are averaged across all firms in the sample for each of the 80 event days to produce a daily average prediction error, represented as:

$$(2) \quad APE_t = 1/N \sum_{j=1}^N PE_{jt}$$

where  $t$  is defined in trading days relative to the announcement event date of the private placement of debt and  $N$  is equal to the number of firms in the sample. A two-day announcement period excess return is then calculated by summing the daily prediction errors for day -1 and day 0. This procedure incorporates the possibility that the announcement of the private placement of debt may have been made during trading hours the previous day and reported with a one-day lag. Given the weekly nature of the Investment Dealer's Digest, larger windows are also calculated to further examine the wealth impact of private placements of debt where the lender is specified. The two-day standardized prediction error for firm  $j$  is calculated as follows:

$$(3) \quad SPE_j = \frac{\sum_{t=-1}^0 PE_{jt}}{S_j}$$

where:

$$(4) \quad S_j = [2V_j^2 \left[ 1 + \frac{1}{M} + \frac{(R_{mt} - R_m)^2}{\sum (R_{mt} - R_m)^2} \right]]^{1/2}$$

$V_j^2$  is the residual variance of the market model regression for firm  $j$ ,  $M$  is the number of days in the estimation period for the market model (140), and  $R_m$  is the average market return over the estimation period. The average standardized two-day prediction error associated with the announcement date is given as:

$$(5) \quad ASPE_t = 1/N \sum_{j=1}^N SPE_{jt}$$

Assuming the individual prediction errors are cross-sectionally independent a Z-statistic is then computed as follows:

$$(6) \quad Z = \sqrt{N}(ASPE_t)$$

The Z-statistic is asymptotically distributed unit normal under the hypothesis that the  $ASPE_t$  equals zero.

To test for statistical differences between subsamples of private placements, a difference in means t-test is performed where:

$$(7) \quad t = \frac{ASPE_1 - ASPE_2}{S_{ASPE1 - ASPE2}}$$

Assuming unequal variances associated with the subsamples, the standard deviation appropriate for this test is computed as follows:

$$(8) \quad S_{ASPE1 - ASPE2} = (S_1^2/N + S_2^2/N)^{1/2}$$

where  $S_1^2$  and  $S_2^2$  are the variances of subsamples one and two, and  $ASPE_1$  and  $ASPE_2$  are the mean excess return associated with subsample one and two.

### Cross-Sectional Regression Analysis

A regression model is a formal means of expressing essential ingredients of a statistical relationship (Neter, Wasserman, and Kutner, 1983). However, in many cases we have limited knowledge about the relationships among these variables. For instance, we hypothesize that announcements of private placements of debt which specify participating lenders will result in a favorable stock price response. The magnitude of this stock price response, however will vary across firms. Cross-sectional regression analysis will be used to examine this differential stock price response associated with private placements of debt. The general form of the regression model is presented in Table VI. Regressions will be estimated using weighted least squares. The standard error of the estimation period residuals is used as the weighting factor to control for heteroscedasticity caused by differences in the variance of stock returns across firms.

We hypothesize that private placements of debt by borrowing firms which utilize reputable lenders and reputable investment banking firms help reduce information asymmetries associated with security issues. Masulis and Korwar (1986) and Asquith and Mullins (1986) suggest that

utility regulation mitigates information asymmetries associated with security issues. To further examine the impact of utility regulation separately from the certification and monitoring role of lenders and investment bankers, we estimate two sets of regressions. In one set the dependent variable is the excess return associated with private placements by industrial firms where the lender is specified and the dependent variable in the second set of regressions is the excess return associated with utility firms where the lender is specified.

We can group the independent variables into three groups; issue related variables, lender variables, and investment banking firm variables. The following discussion develops the theoretical motivation for the inclusion of the independent variables in the regression model.

#### Independent Variables

Issue related variables describe characteristics of the private placement issue that are unrelated to the lender involved in the private placement. The following issue related variables will be included in the regression model: (1) the dollar amount of the issue; (2) the log of the firm's common stock; (3) the relative size of the issue, which is the dollar amount of debt sold in the private placement divided by the market value of the borrowing firm's common stock one month prior to the private placement announcement; (4) the maturity of the debt issue;

TABLE VI  
REGRESSION MODEL

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$$ER_i = B_0 + \sum B_i X_i + \epsilon_i$$

where:

- $ER_i$  = is the two-day announcement period excess return associated with announcements of private placements of debt for firm  $i$
- $B_0, \dots, B_7$  = regression coefficients
- $X_1, \dots, X_7$  = independent variables described below:
- $X_1$  = the dollar amount of the private placement issue (SIZE)
- $X_2$  = the log of the market value of the borrowing firm's common stock the month preceding the private placement issue (LOG MV)
- $X_3$  = the dollar amount of the private placement issue divided by the market value of the common stock of the borrowing firm the month preceding the private placement issue (RELATIVE SIZE)
- $X_4$  = variable representing the maturity of the debt issue (MAT)
- $X_5$  = variable representing the beta of the borrowing firm estimated using the market model during the estimation period (BETA)
- $X_6$  = dummy variable representing private placements in which the primary lender is an insurance company (Insurance)
- $X_7$  = dummy variable indicating that the investment banking firm was either Goldman, Sachs & Co., First Boston Corp., J.P. Morgan, Salmon Brothers Inc., Merrill Lynch, or Shearson Lehman (Special)
-

and (5) the firm's beta, a measure of firm specific risk, estimated using the market model during the estimation period.

Mikkelson and Partch (1986) and James (1987) found that there was no significant relationship between the excess return associated with announcements of bank loans or private placements of debt and issue related variables, such as the size and maturity of the issue and the size of the borrowing firm. However, Szewczyk and Varma (1991) and Fields and Mais (1991) found a statistically significant positive relationship between the excess return associated with announcements of private placements and the relative size of the issue. These findings are consistent with the argument that there are reduced information asymmetries and increased monitoring associated with a private placement of debt. In the context of the present study, a positive relationship between the excess return associated with private placements of debt and the relative size of the issue would provide support for the argument that the willingness of lenders to take larger positions in the firm's securities signals to the market the lender's confidence in the firm's prospects and also creates larger blockholders who have an incentive to perform increased monitoring of the firm's managers.

In a related context, the excess return associated with private placements of debt could reflect the role of the size of the borrowing firm. Given the reputation and

monitoring activities of the lender, the ability to privately place debt may be good news for small firms unable to meet the SEC requirements for offering debt publicly. However, private placements by larger borrowing firms may not provide much news to the capital market since these firms have other ways of disseminating information. The natural log of the market value of the borrowing firm's common stock will be included in the regression model to capture these effects.

The significant stock price response associated with announcements of private placements of debt may be attributable to the maturity of the issue, particularly since private placements of debt typically have shorter maturities relative to public issues of debt. Easterbrook (1984) and Fama (1985) argue that firms which utilize short-term debt for their financing needs subject themselves to periodic evaluation by outside monitors, such as lenders and investment bankers. A firm's decision to commit to periodic evaluations can provide a positive signal regarding management's assessment of the firm's future earnings prospects. It should be noted, however, that private placements of debt are not typically considered short-term debt and are not usually renewed. Although, lenders may purchase the common stock of the borrowing firm which provides them with recourse similar to the renewal process associated with short-term debt. If the lender's ability to purchase stock is similar to the benefits associated with

short-term debt, the negative relationship between the maturity of the debt issue and the excess return may not occur. In order to examine this relationship, the maturity of the debt issue will be included in the regression model.

The stock price response associated with announcements of private placements of debt where the lender is specified may be related to the riskiness of the borrowing firm issuing debt. Smith and Warner (1977) suggest that private placements are more likely to be used by riskier firms than public debt offerings. Myers and Majluf (1984) argue that the stock price response to security offerings depends on the sensitivity of the value of the new securities to changes in firm value. One implication of this finding is that private placements of debt by borrowing firms which are perceived as being risky will result in a less positive stock price response. As a result, we would expect the magnitude of the excess return associated with private placements of debt where the lender is specified to be inversely related to the risk of the borrowing firm. As a proxy for the risk of the borrowing firm, the beta estimated with the market model during the estimation period will be included in the regression model.

Finally, a dummy variable that indicates private placements of debt in which an insurance company is the primary lender will be included in some of the regression models in order to further examine the certification and monitoring role of reputable lenders. In addition, a dummy



variable for private placements which utilize the Special category of investment banking firms will be included in some of the regression models in order to further examine the impact of the prestige of investment banking firms participating in private placements of debt.

## CHAPTER IV

### EMPIRICAL RESULTS

#### Stock Price Response to Private Placements

Table VII presents a summary of the notation that will be used in Tables VIII through XXVI that follow. Given the weekly nature of the Investment Dealer's Digest, excess returns were calculated for a five day event window (-5,0) in addition to the two day event window (-1,0). The results of the analysis utilizing a five day event window were not statistically different from the results produced using a two day event window. Thus, we report only the results for the two day event period.

The two-day announcement period (,1,0) excess return (APE) for subsamples of private placements of debt are presented in Table 8 on page 80. For the full sample of announcements of private placements of debt the excess return for the window (-1,0) is +.19% with a Z-statistic of 2.48 which is significantly different from zero at the .01 level. For industrial offerings, the excess return is +.15% with a Z-statistic of 1.72 which is significant at the .05 level and the excess return for utilities is +.45% with a Z-statistic of 2.14 which is also significant at the .05

TABLE VII  
NOTATION TO BE ANALYZED

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Lender is Specified	= the lender is specified in the private placement announcement
Lender is not Specified	= the lender is not specified in the private placement announcement
Industrial	= the borrowing firm is classified as an industrial firm
Utility	= the borrowing firm is a public utility (SIC 4900-4999)
Financial	= the borrowing firm is a financial firm (SIC 6000-6900 except for conglomerates having SIC 6711)
Insurance	= the lender participating in the private placement is one insurance company
Pension	= the lender participating in the private placement is one pension fund
Financial	= the lender participating in the private placement is one bank or financial firm
Other	= there is one lender specified in the private placement announcement but it is not insurance, pension or financial
MORE	= there is more than one lender specified in the private placement announcement
1AND	= the announcement indicates that several lenders are participating, but only one lender is identified
2AND	= the announcement indicates that several lenders are participating, but only two lenders are identified
LEND2	= two lenders are specified in the private placement announcement
LEND3	= three lenders are specified in the private placement announcement

TABLE VII (Continued)

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LEND4+	= four or more lenders are specified in the private placement announcement
LEND2 INS	= both lenders are insurance companies
LEND3 INS	= all three lenders are insurance companies
LEND4+ INS	= all of the lenders specified are insurance companies
LEND2 OTH	= at least one of the lenders specified is not an insurance company
LEND3 OTH	= at least one of the lenders specified is not an insurance company
LEND4+ OTH	= at least one of the lenders specified is not an insurance company
Special	= the investment banking firm utilized is either Goldman Sachs, First Boston, J. P. Morgan, Salomon Brothers, Merrill Lynch, or Shearson Lehman
NOIB	= no investment banking firm is specified in the private placement announcement
NO-Insurance	= the lender is specified in the announcement, but it is not one insurance company
Subscripts	
a	= significant at the .01 level
b	= significant at the .05 level
c	= significant at the .10 level
d	= the excess return for subsamples of 1AND and 2AND was not calculated since the precise number of lender participating in the private placement is not known
e	= the subsample includes no private placement announcements or only one announcement

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TABLE VIII  
 ABNORMAL RETURNS FOR THE FULL SAMPLE OF  
 PRIVATE PLACEMENTS OF DEBT

Sample Category	APE	Z-Stat	Percentage Positive	Sample Size
Full sample	+.19	2.48 <sup>a</sup>	.51	734
Industrials	+.15	1.72 <sup>b</sup>	.50	577
Financials	-.05	.44	.50	42
Utilities	+.45	2.14 <sup>b</sup>	.56	115
Lender is specified	+.38	2.33 <sup>a</sup>	.53	403
Industrials	+.27	1.62 <sup>c</sup>	.53	326
Financials	+.63	1.29 <sup>c</sup>	.57	14
Utilities	+.59	1.68 <sup>b</sup>	.51	63
No lender is specified	+.07	1.07	.48	331
Industrials	+.01	.76	.46	251
Financials	-.39	-.37	.46	28
Utilities	+.64	1.30 <sup>c</sup>	.62 <sup>b</sup>	52

level. The positive stock price response associated with private placements by utilities is consistent with the findings of Szewczyk and Varma (1991). However, these findings are in sharp contrast to the negative stock price response associated with private placements of straight debt noted by James (1987) and Mikkelsen and Partch (1986).

When the sample is divided into announcements of private placements of debt where the lender is specified and announcements where no lender is specified it is evident that the significant excess return associated with the full sample of private placements is attributable to private placements which specify participating lenders. For the sample where the lender is specified, the excess return is +.38% with a Z-statistic of 2.33 which is significantly different from zero at the .01 level. Although the announcement period excess return for the sample where no lender is specified is +.07%, it is not significant. The statistically significant positive stock price response associated with private placements of debt where the lender is specified provides support for the argument that high quality borrowing firms which specify reputable lenders in the private placement announcement signals positive information to the market as a result of the certification and monitoring roles of these lenders.

A difference in means t-test is performed to test the hypothesis that there is no difference between the APE for announcements of private placements where the lender is

known and where the lender is not identified. A summary of the results of the difference in means test associated with subsamples of private placements reported in Table VIII is presented in Table IX. The difference between the mean excess return associated with private placements of debt where the lender is specified and private placements where no lender is specified is statistically significant at the .05 level. These findings are unchanged when industrial borrowing firms are analyzed separately. Although the excess return associated with utility and financial borrowing firms is more positive for private placements of debt where the lender is specified, the difference between the mean excess return associated with each of these subsamples of private placements is not statistically significant.

TABLE IX  
SIGNIFICANCE OF THE DIFFERENCE IN MEANS TESTS  
FOR THE FULL SAMPLE

	LENDER IS SPECIFIED	Industrial	Utility	Financial
NO LENDER SPECIFIED	2.1 <sup>b</sup>	-	-	-
Industrial	-	2.4 <sup>b</sup>	1.2	1.3
Utility	-	.97	1.6	-.82
Financial	-	-.25	.34	.95

### Stock Price Response for a Single Lender

If the market perceives that a particular category of lender participating in private placements of debt provide greater certification services and/or perform more effective monitoring activities relative to other lenders, then a positive stock price response would be expected to be associated with that type of lender. Table X presents the excess returns for announcements of private placements of debt for the following categories of lenders: (1) insurance companies; (2) pension funds; (3) banks and financial firms; and (4) other institutional investors. The excess returns associated with these lender categories for private placements by industrial, utility and financial borrowing firms are presented in Table XI, Table XII and Table XIII respectively. The excess return reported in Table X for private placements of debt where the primary lender is an insurance company is +.40% with a Z-statistic of 2.15 which is significantly different from zero at the .05 level. Although the excess returns associated with the lender categories of pension funds, financial firms and other institutional investors are +.33%, -1.86%, and 1.40% respectively, these results are based on smaller subsamples of private placement announcements and the excess returns are not statistically different from zero. When industrial borrowing firms are analyzed separately the excess return associated with insurance companies is +.44% and is



statistically significant at the .05 level. The excess return associated with the other individual lender categories for industrial borrowing firms are not significant. Moreover, the excess return associated with private placements by utility and borrowing firms for each of the individual lender categories are not significant.

The positive excess return associated with private placements by industrial firms where the primary lender is an insurance company provides support for the hypothesis that insurance companies have developed a reputation of providing effective certification and monitoring services in private placements of debt. Insurance companies are given access to private information about the borrowing firm's financial prospects and then evaluate the borrowing firm's securities on the basis of this private information. We suggest that insurance companies have developed a reputation of providing expert credit evaluation during this process, particularly given that insurance companies are the dominant lender in the private placement market and debt comprises the largest component of their asset portfolio. Thus, insurance companies render a quality certification of the borrowing firm by their willingness to purchase the firm's debt and monitor the firm during the maturity of the loan. These roles are particularly enhanced given that insurance companies can also purchase common stock of the borrowing firm, thus providing them with recourse to affect the borrowing firm's decision process. Rajan (1992) suggests

TABLE X  
 ABNORMAL RETURNS FOR PRIVATE PLACEMENTS OF DEBT  
 WHERE THE LENDER IS SPECIFIED

Sample Category	APE	Z-Stat	Percentage Positive	Sample Size
<u>Lender categories</u>				
<u>Single Lender</u>				
Insurance	+.40	2.15 <sup>b</sup>	.52	189
Pension funds	+.33	.59	.48	21
Financial	-1.86	-.83	.50	4
Other	+1.40	1.19	.67	3
<u>Multiple Lenders</u>				
MORE	+.19	1.09	.55	186
<u>MORE subsamples</u>				
1AND	+.14	.69	.54	39
2AND	-.18	.29	.46	13
LEND2	+1.16	2.25 <sup>b</sup>	.54	28
LEND3	+.40	.19	.48	29
LEND4+	-.15	-.39	.60	77
Subsamples of MORE where the lenders are insurance companies <sup>d</sup>				
LEND2 insurance	+1.60	1.68 <sup>b</sup>	.64	14
LEND3 insurance	+.87	.82	.58	19
LEND4+ insurance	-.22	-.67	.55	29
Subsamples of MORE where the lenders are not insurance companies				
LEND2 other	+.84	1.62 <sup>c</sup>	.43	14
LEND3 other	-.49	-.81	.30	10
LEND4+ other	-.10	-.03	.63	48

TABLE XI  
 ABNORMAL RETURNS FOR PRIVATE PLACEMENTS OF DEBT BY  
 INDUSTRIAL FIRMS WHERE THE LENDER IS SPECIFIED

Sample Category	APE	Z-Stat	Percentage Positive	Sample Size
<u>Lender categories</u>				
<u>Single Lender</u>				
Insurance	+.44	2.08 <sup>b</sup>	.53	160
Pension funds	+.45	.75	.56	18
Financial	-2.67	-1.06	.33	3
Other	-			
<u>Multiple Lenders</u>				
MORE	+.12	.16	.55	145
<u>MORE subsamples</u>				
1AND	+.37	.96	.54	29
2AND	-.69	-.67	.46	9
LEND2	+1.01	1.16	.50	22
LEND3	+.61	.54	.52	23
LEND4+	-.38	-1.26	.56	62
Subsamples of MORE where all the lenders are insurance companies <sup>d</sup>				
LEND2 insurance	+1.28	.89	.62	13
LEND3 insurance	+1.14	.95	.60	15
LEND4+ insurance	-.52	-1.34 <sup>c</sup>	.48	25
Subsamples of MORE where the lenders are not insurance companies				
LEND2 other	+.82	.90	.43	9
LEND3 other	-.31	-.28	.43	7
LEND4+ other	-.29	-.53	.62	37

TABLE XII

ABNORMAL RETURNS FOR PRIVATE PLACEMENTS OF DEBT BY  
UTILITY FIRMS WHERE THE LENDER IS SPECIFIED

Sample Category	APE	Z-Stat	Percentage Positive	Sample Size
<u>Lender categories</u>				
<u>Single Lender</u>				
Insurance	+ .41	1.08	.48	23
Pension funds	-.39 <sub>e</sub>	-.27	.00	3
Financial	- <sub>e</sub>			
Other	- <sub>e</sub>			
<u>Multiple Lenders</u>				
MORE	+ .29	1.46 <sup>C</sup>	.57	36
<u>MORE subsamples</u>				
1AND	-1.19	-.99	.38	8
2AND	+.11	+.22 <sup>a</sup>	.50	2
LEND2	+1.69	2.63 <sup>a</sup>	.67	6
LEND3	-.40	-.66 <sub>b</sub>	.33	6
LEND4+	+.82	+1.66 <sup>b</sup>	.73	15
Subsamples of MORE where all the lenders are insurance companies <sup>d</sup>				
LEND2 insurance	- <sub>e</sub>			
LEND3 insurance	-.14	-.06 <sub>c</sub>	.50	4
LEND4+ insurance	+1.64	+1.49 <sup>c</sup>	1.00	4
Subsamples of MORE where the lenders are not insurance companies				
LEND2 other	+.88	+1.51 <sup>C</sup>	.6	5
LEND3 other	-.91	-1.06	.00	2
LEND4+ other	+.53	+1.04	.64	11

TABLE XIII

ABNORMAL RETURNS FOR PRIVATE PLACEMENTS OF DEBT FOR  
FINANCIAL FIRMS WHERE THE LENDER IS SPECIFIED

Sample Category	APE	Z-Stat	Percentage Positive	Sample Size
<u>Lender categories</u>				
<u>Single Lender</u>				
Insurance	-.66 <sub>e</sub>	-.80	.33	6
Pension funds	- <sub>e</sub>			
Financial	- <sub>e</sub>			
Other	+2.63	1.54 <sup>c</sup>	1.00	2
<u>Multiple Lenders</u>				
MORE	+1.39	1.96 <sup>b</sup>	.60	5
<u>MORE subsamples</u>				
1AND	+2.13	+1.38 <sup>c</sup>	1.00	2
2AND	+1.79 <sub>e</sub>	+1.95 <sup>b</sup>	.50	2
LEND2	- <sub>e</sub>			
LEND3	- <sub>e</sub>			
LEND4+	- <sub>e</sub>			
Subsamples of MORE where all the lenders are insurance companies <sup>d</sup>				
LEND2 insurance	- <sub>e</sub>			
LEND3 insurance	- <sub>e</sub>			
LEND4+ insurance	- <sub>e</sub>			
Subsamples of MORE where the lenders are not insurance companies				
LEND2 other	- <sub>e</sub>			
LEND3 other	- <sub>e</sub>			
LEND4+ other	- <sub>e</sub>			

this is similar to the renewal process associated with short-term bank loans. Therefore, high quality borrowing firms which place debt privately with insurance companies provide a signal to the capital market about the true value associated with their future financial prospects.

The insignificant results associated with the individual lender categories for private placements by utility firms provide support for the argument that utility regulation, rather than the monitoring and certification roles of reputable lenders, helps mitigate information asymmetries associated with private placements of debt by utility firms. Szewczyk and Varma (1991) found a positive stock response associated with private placements by utilities. They suggest that their results provide support for the argument that private placements of debt provide positive information to the market about the value of the borrowing firm. However, Asquith and Mullins (1986) and Masulis and Korwar (1986) found that utility regulation helps reduce information asymmetries associated with security offerings by utility firms. We found that the stock price response associated with the full sample of 115 announcements of private placements of debt by utility borrowing firm's is +.45% which is significant at the .05 level. Whereas, the excess returns for private placements by utilities for the individual lender categories are not significant. These results provide support for the argument that utility regulation is more important than the

reputation of lenders in contributing to the positive stock price response associated with private placements of debt by utility borrowing firms.

#### Stock Price Response for Multiple Lenders

In many instances there is more than one lender participating in a single private placement of debt. There are 186 announcements included in the full sample which specify more than one lender participating in the private placement of debt. In order to examine the relationship between the stock price response associated with announcements of private placements of debt and the number of lenders participating in the private placement, the excess return is calculated for private placements which specify multiple lenders, noted as MORE in Table X. For the window (-1,0) the excess return for the MORE category is +.19% with a Z-statistic of 1.09 which is not significant. The results are unchanged when industrial and utility borrowing firms are analyzed separately. Although the excess return associated with financial borrowing firms which specified more than one lender is statistically significant, there are only five announcements included in the subsample and one announcement appears to be the primary contributing factor to the excess return.

These results indicate that the costs resulting from private placements which have multiple lenders may contribute to the insignificant stock price response. It

should be noted, however, that the multiple lender category (MORE) includes announcements of private placements where the number of lenders can range from two lenders up to thirty-five lenders. Perhaps private placements which have fewer participating lenders help reduce the costs resulting from multiple lender monitoring discussed previously. We investigate the following subsamples of the multiple lender category (MORE): (1) the announcement indicates that several lenders are participating in the private placement, although only one lender is specifically identified in the private placement announcement (1AND); (2) the announcement indicates that several lenders are participating, but only two lenders are specifically identified (2AND); (3) only two specified lenders participated in the private placement (LEND2); (4) three lenders are identified in the private placement announcement (LEND3); and (5) there are more than three specified participating lenders identified in the private placement announcement (LEND4+). These results are reported in Table X, Table XI, Table XII and Table XIII respectively.

For the subsample LEND2, the excess return is +1.16% with a Z-statistic of 2.25 which is significant at the .05 level. The stock price response associated with the other subsamples of private placements where there is more than one specified lender are not significant. The excess return reported in Table XI for the subsample LEND2 where the borrowing firm is an industrial firm is not statistically



significant. Although the excess return associated with LEND2 and LEND4+ for utility borrowing firms are significant at the .01 and .05 level respectively, the results are based on relatively small subsamples of private placements. These findings provide some support for the argument that private placements of debt which specify two participating lenders have a favorable impact on firm value, however, the results are not conclusive.

There is a positive stock price response associated with private placements by industrial firms where the primary lender is an insurance company. These results provide support for the hypothesis that insurance companies have developed a reputation of providing more effective monitoring and certification services relative to other lenders in private placements of debt. In order to determine the role of insurance companies in private placements of debt which specify multiple lenders, the excess return is calculated for subsamples of LEND2, LEND3, and LEND4+ in which all of the specified lenders are insurance companies. It should be noted that the role of insurance companies associated with the subsamples 1AND and 2AND will not be examined since the precise number of lenders participating in the private placements is not known. The excess return associated with the subsample LEND2 in which both lenders are insurance companies is +1.60% with a Z-statistic of 1.68 which is significant at the .05 level. However, this result appears to be due to

one outlier since the excess returns for subsamples of LEND2 where both lenders are insurance companies for industrial, utility and financial firms are not statistically significant (see Tables X, XI, and XII). The excess returns for subsamples of LEND3 and LEND4+ are also not significant.

In summary, these results provide some support for the argument that private placements which specify two lenders convey favorable information about the borrowing firm to the capital market, particularly if the lenders are both insurance companies. However, when industrial, utility and financial borrowing firms are analyzed separately, the excess returns associated with LEND2 subsamples are not statistically significant. The insignificant results associated with private placements which specify more than two lenders may indicate the possibility of inefficiencies. Since several lenders are performing monitoring activities there is ultimately duplication of monitoring efforts and costs. In a related context, with several lenders participating in the private placement, private information regarding the borrowing firm is revealed to several lenders thus diminishing the advantage of privacy of information associated with the private placement market. This may also provide evidence of the free rider problem, where some lenders receive the benefits resulting from monitoring activities performed by another lender without incurring the necessary costs. Therefore, given the mixed results associated with multiple lenders and the positive stock

price response for private placements where the lender is a single insurance company, it appears that the reputation of the lender rather than the number of lenders is the most important factor contributing to the stock price response for private placements of debt where the lender is specified.

Stock Price Response Associated with  
Investment Banking Firm Categories

Table XIV presents the two-day announcement period excess returns for announcements of private placements of debt where the sample has been stratified by investment banker category. For the full sample of private placements where the borrowing firm utilized a prestigious investment banker, noted as Special in Table XIV, the excess return for the window (-1,0) is +.14% which is not statistically significant. Although the excess return associated with financial borrowing firms which utilized reputable investment bankers is significant at the .05 level, the analysis is based on a small sample with two borrowing firms driving the significant positive stock price response. It appears that factors other than the prestige of the investment banking firm contributes to the stock price response associated with private placements of debt. This result is further supported by examining the stock price response associated with the full sample of private placements of debt in which no investment banker is

specified in the private placement announcement, noted as NOIB in Table XIV. The excess return associated with NOIB is +.46%, but is not statistically significant. The difference in the mean excess return between these two samples is not statistically significant.

The excess returns associated with the investment banking firm categories for subsamples of private placements of debt are also examined to provide further evidence regarding the certification and monitoring roles of lenders and investment bankers. Table XV presents the stock price response associated with the Special and NOIB investment banking firm categories for the sample of private placements of debt where the lender is specified. Table XVI presents the excess return for investment banking firm categories for private placements of debt where no lender is specified.

For the sample of private placements by industrial firms where the lender is specified and a prestigious investment banking firm is utilized the excess return is +.66% with a Z-statistic of 2.24 which is significant at the .05 level. The excess return for private placements by industrial firms where the lender and investment banking are not specified is +.50% with a Z-statistic of .42 which is not significant. The excess return for industrial firms where no lender is specified using a Special category of investment banker is -.40% which is not statistically significant. For the sample of industrial borrowing firms

TABLE XIV  
 ABNORMAL RETURNS FOR PRIVATE PLACEMENTS OF DEBT  
 FOR INVESTMENT BANKER CATEGORIES

Sample Category	APE	Z-Stat	Percentage Positive	Sample Size
<u>Special Category of Investment Bankers</u>				
Full sample	+.14	1.02	.50	169
Industrials <sup>d</sup>	+.27	1.50 <sup>c</sup>	.55	122
Financials	+1.02	1.69 <sup>b</sup>	.70	10
Utilities	-.54	-1.43 <sup>c</sup>	.32	37
<u>No Investment Banking Firm (NOIB)</u>				
Full sample	+.46	1.46 <sup>c</sup>	.57	138
Industrials	+.38	1.25	.56	116
Financials	+.42	1.12	.62	13
Utilities	-.04	-.27	.56	9

TABLE XV

ABNORMAL RETURNS FOR PRIVATE PLACEMENTS OF DEBT WHERE THE  
LENDER IS SPECIFIED FOR INVESTMENT  
BANKING FIRM CATEGORIES

Sample Category	APE	Z-Stat	Percentage Positive	Sample Size
<u>Special Category of Investment Bankers</u>				
<u>Lender is Specified</u>	+.45	1.89 <sup>b</sup>	.55	106
Industrials <sup>d</sup>	+.66	2.24 <sup>b</sup>	.62	78
Financials	+1.80	1.97 <sup>b</sup>	.67	3
Utilities	-.38	-.74	.32	25
<u>No Investment Banking Firm (NOIB)</u>				
<u>Lender is Specified</u>	+.36	1.47 <sup>c</sup>	.55	118
Industrials	+.36	1.18	.54	98
Financials	+.23	.16	.63	8
Utilities	+.43	1.12	.56	12

TABLE XVI

ABNORMAL RETURNS FOR PRIVATE PLACEMENTS OF DEBT WHERE NO  
LENDER IS SPECIFIED FOR INVESTMENT  
BANKING FIRM CATEGORIES

Sample Category	APE	Z-Stat	Percentage Positive	Sample Size
<u>Special Category of Investment Bankers</u>				
<u>No Lender is Specified</u>	-.37	-.79	.43	63
Industrials <sup>d</sup>	-.40	-.48	.41	44
Utilities	+.68	.72	.71	7
Financials	-.85	-1.44 <sup>c</sup>	.33	12
<u>No Investment Banking Firm (NOIB)</u>				
<u>No Lender is Specified</u>	+1.05	.27 <sup>c</sup>	.65	20
Industrials	+.50	.42	.67	18
Financials	- <sup>e</sup>			
Utilities	- <sup>e</sup>			

where the lender is known with no investment banking firm identified in the private placement announcement, the excess return is  $+0.36\%$  which is not significant. Based upon these results, the positive excess return for private placements of debt by industrial firms where the lender is specified and a prestigious investment banking firm is utilized provides support for the hypothesis that reputable lenders and investment bankers provide valuable services in private placements of debt.

Table XV and Table XVI also present the stock price response associated with private placements of debt for the investment banking firm categories where the borrowing firm is a utility. The excess return for the sample where the lender is specified and a prestigious investment banking firm is utilized is  $-0.38\%$  with a Z-statistic of  $-0.74$ , which is not statistically significant. Although announcements which identify a prestigious investment banker but do not identify the lender participating in the private placement result in an excess return of  $+0.68\%$ , it is not statistically significant. For private placements by utilities where the investment banker is not known but the announcement specifies the lender the excess return is  $+0.43\%$ , which is not statistically different from zero. These results are consistent with the hypothesis that utility regulation is more important in reducing information asymmetries for utility private placements than the benefits associated with reputable lenders and investment bankers.



Table XVII presents the excess return for the investment banking firm categories associated with announcements of private placements for single and multiple lenders. The excess returns for the above categories of private placements by industrial, utility and financial borrowing firms are presented in Table XVIII, Table XIX and Table XX, respectively. In order to consider the relative importance of reputable lenders and investment bankers as well as the impact of utility regulation in private placements of debt, Table XXI presents summary results for private placements by industrial and utility firms for subsamples of investment banking firm categories where (1) the primary lender is an insurance company (noted as Insurance in Table XXI); and (2) the lender is specified in the private placement announcement, but the primary lender is not an insurance company (noted as NO-Insurance in Table XXI). Table XXII presents a summary of the results of the difference in means tests associated with subsamples of private placements included in Table XXI.

The excess return reported in Table XXI for private placements by industrial firms for the subsample Insurance and Special is +1.48% with a Z-statistic of 2.74 which is statistically significant at the .01 level. It should be noted that the excess returns associated with private placements with pension funds which utilized the Special category of investment bankers are not significant. The stock price response associated with the subsample Insurance

TABLE XVII

ABNORMAL RETURNS FOR PRIVATE PLACEMENTS OF DEBT FOR LENDER  
CATEGORIES AND INVESTMENT BANKING FIRM CATEGORIES

Sample Category	APE	Z-Stat	Percentage Positive	Sample Size
<u>Special Category of Investment Bankers</u>				
<u>Single Lender</u>				
Insurance	+1.12	2.27 <sup>b</sup>	.58	28
Pension funds	+.25	.28	.63	8
Financial	- <sup>e</sup>			
Other	- <sup>e</sup>			
<u>Multiple Lenders</u>				
MORE	+.23	.85	.56	69
<u>No Investment Banking Firm (NOIB)</u>				
<u>Single Lender</u>				
Insurance	+.13	.57	.51	85
Pension funds	+.70	.69	.57	7
Financial	- <sup>e</sup>			
Other	- <sup>e</sup>			
<u>Multiple Lenders</u>				
MORE	+1.08	1.60 <sup>c</sup>	.69 <sup>b</sup>	22

TABLE XVIII

ABNORMAL RETURNS FOR PRIVATE PLACEMENT OF DEBT BY  
INDUSTRIAL FIRMS AND INVESTMENT  
BANKING FIRM CATEGORIES

Sample Category	APE	Z-Stat	Percentage Positive	Sample Size
<u>Special Category of Investment Bankers</u>				
<u>Single Lender</u>				
Insurance	+1.48	2.74 <sup>a</sup>	.68	22
Pension funds	+.64	.57	.20	5
Financial	- <sup>e</sup>			
Other	- <sup>e</sup>			
<u>Multiple Lenders</u>				
MORE	+.36	.85	.56	50
<u>No Investment Banking Firm (NOIB)</u>				
<u>Single Lender</u>				
Insurance	+.14	.56	.51	72
Pension funds	+.70	.69	.57	7
Financial	- <sup>e</sup>			
Other	- <sup>e</sup>			
<u>Multiple Lenders</u>				
MORE	+1.14	1.19	.67	18

TABLE XIX

ABNORMAL RETURNS FOR PRIVATE PLACEMENTS OF DEBT BY UTILITY  
FIRMS AND INVESTMENT BANKING FIRM CATEGORIES

Sample Category	APE	Z-Stat	Percentage Positive	Sample Size
<u>Special Category of Investment Bankers</u>				
<u>Single Lender</u>				
Insurance	-.16	-.35	.17	6
Pension funds	-.39	-.27	.00	3
Financial	_e			
Other	_e			
<u>Multiple Lenders</u>				
MORE	-.46	-.59	.44	16
<u>No Investment Banking Firm (NOIB)</u>				
<u>Single Lender</u>				
Insurance	+.25	.50	.50	8
Pension funds	_e			
Financial	_e			
Other	_e			
<u>Multiple Lenders</u>				
MORE	+.79	+1.23	.75	4

TABLE XX

ABNORMAL RETURNS FOR PRIVATE PLACEMENTS OF DEBT BY  
FINANCIAL FIRMS AND INVESTMENT  
BANKING FIRM CATEGORIES

Sample Category	APE	Z-Stat	Percentage Positive	Sample Size
<u>Special Category of Investment Bankers</u>				
<u>Single Lender</u>				
Insurance	- <sup>e</sup>			
Pension funds	- <sup>e</sup>			
Financial	- <sup>e</sup>			
Other	- <sup>e</sup>			
<u>Multiple Lenders</u>				
MORE	+1.80	+1.97 <sup>b</sup>	.67	3
<u>No Investment Banking Firm (NOIB)</u>				
<u>Single Lender</u>				
Insurance	-.78	-.87	.60	5
Pension funds	- <sup>e</sup>			
Financial	- <sup>e</sup>			
Other	- <sup>e</sup>			
<u>Multiple Lenders</u>				
MORE	- <sup>e</sup>			

TABLE XXI

ABNORMAL RETURNS FOR PRIVATE PLACEMENTS OF DEBT BY  
INDUSTRIAL AND UTILITY FIRMS WHERE THE LENDER IS  
AN INSURANCE COMPANY FOR INVESTMENT BANKING  
FIRM CATEGORIES AND WHERE THE LENDER IS  
NOT AN INSURANCE COMPANY FOR  
INVESTMENT BANKING  
FIRM CATEGORIES

Sample Category	APE	Z-Stat	Percentage Positive	Sample Size
<u>Insurance - Special Category</u>				
Industrials	+1.48	2.74 <sup>a</sup>	.68	22
Utilities	-.16	-.35	.17	6
<u>Insurance - NOIB Category</u>				
Industrials	+.14	.56	.51	72
Utilities	+.25	.50	.50	8
<u>NO-Insurance - Special Category</u>				
Industrials	+.34	.92	.59	56
Utilities	-.45	-.65	.37	19
<u>NO-Insurance - NOIB Category</u>				
Industrials	+1.02	1.38 <sup>c</sup>	.64	25
Utilities	+.79	1.23	.75	4

TABLE XXII

SIGNIFICANCE OF THE DIFFERENCE IN MEANS TEST FOR PRIVATE  
 PLACEMENTS OF DEBT BY INDUSTRIAL FIRMS FOR LENDER  
 CATEGORIES AND INVESTMENT BANKING  
 FIRM CATEGORIES<sup>1</sup>

	Ins Special	Ins NOIB	NO-Ins Special	NO-Ins NOIB
Ins Special	-	2.1 <sup>b</sup>	1.9 <sup>c</sup>	1.1
Ins NOIB	2.1 <sup>b</sup>	-	1.4	-1.3
NO-Ins Special	1.9 <sup>c</sup>	1.4	-	-.25
NO-Ins NOIB	1.1	-1.3	-.25	-

<sup>1</sup> - the difference between the mean excess return associated with the above subsamples for private placements by utility borrowing firms is not significant for any pair of subsamples.

and NOIB is +.14% which is not significant. Moreover, the difference between the mean excess return associated with private placements to insurance companies utilizing a Special category investment banker and private placements to insurance companies not utilizing an investment banker is significant at the .05 level.

In order to further isolate the role of the investment banking firm in private placements of debt, an excess return is calculated for investment banking firm categories for the subsample of private placements where the lender is specified in the private placement announcement, but is not an insurance company. The excess returns for private placements with a lender that is not an insurance company utilizing a Special category investment banking firm and private placements in which no investment banking firm is specified where the lender is not an insurance company are not significant. Based upon these results, it appears that private placements of debt by industrial firms which utilize a prestigious investment banking firm and the participating lender is an insurance company provide positive information to the capital market regarding the true value of the borrowing firm.

Table XXI also presents the excess return for these subsamples of private placements by utility borrowing firms. However, the excess returns associated with the above subsamples for utility borrowing firms are not significant. This results provides further support for the argument that



the impact of utility regulation is more important than the reputation of the lender or investment banking firm in private placements of debt by utility borrowing firms.

Finally, it should be noted that when the excess return is calculated for the above subsamples of private placements by financial firms, in general, none of the subsamples result in a significant stock price response. The excess return associated with private placements for the subsample MORE and Special is significant, however, there are only three announcements included in the subsample.

#### Regression Analysis

The stock price response associated with announcements of private placements where the lender is specified is analyzed using regression analysis. The complete regression model is presented in Table VI. We estimate two sets of regressions, one for industrial firms and the other for utilities. In both regressions the dependent variable is the announcement period excess return for the window  $(-1,0)$ . Regressions are estimated using weighted least squares with the standard error of the estimation period residuals used as the weighting factor to adjust for heteroscedasticity caused by different variance of stock returns across firms. In this section the results of the regression analysis will be discussed along with the implications of these results in the context of this study.

### Size Related Variables

Since private placements involve a relatively small number of lenders in comparison to public offerings of debt, private placements establish new blockholders of the firm's securities. The ability of a borrowing firm to privately place a relatively large debt issue may convey positive information to the capital market in that it reflects the willingness of lenders to make a large commitment of funds. The creation of larger blockholders may also result in increased monitoring of the borrowing firm as a result of the debt issue. The importance of this may also be related to the size of the issue in relation to the size of the borrowing firm. Therefore, we expect that there is a positive relationship between the size variables and the excess return associated with private placements of debt where the lender is specified. In equations 1, 2, and 3 of Table XXIII the impact of the size of the issue and borrowing firm is examined by regressing the announcement period excess return on the dollar amount of the debt issue (SIZE), the natural log of the market value of the borrowing firm's common stock in the month prior to the private placement issue (LOG MV) and also on the dollar amount of the issue divided by the market value of the borrowing firm's common stock (REL SIZE).

For industrial borrowing firms, the coefficients for SIZE and LOG MV are not statistically significant. However,

the coefficient for relative size is -3.14 and is significant at the .01 level ( $t = -2.56$ ). This finding provides evidence of a negative relationship between the excess return associated with private placements of debt and the relative size of the issue. This result is puzzling given that a priori a positive relationship was expected between the size variables and the excess return. This indicates that some factor associated with the issue, such as risk factors or potential agency problems resulting from the debt issue are not captured in the regression model.

Equations 1.2, 2.2 and 3.2 of Table XXIII present the regression results for private placements by utility borrowing firms. The coefficient estimates for SIZE, REL SIZE and LOG MV are not significant. Based upon these results it appears that factors other than the size variables contribute to the stock price response associated with private placements of debt by utility firms. It should be noted that Szewczyk and Varma (1991) found a statistically significant positive relationship between the excess return associated with private placements by utility firms and the relative size of the debt issue. However, their sample included a larger number of private placements (293 announcements in comparison to 63 in the present study) and extended over a longer time period (included announcements by utilities from 1963 to 1986 in comparison to 1980 to 1990 in this study). Moreover, when they included variables representing the borrowing firm's

TABLE XXIII

ESTIMATE OF WEIGHTED LEAST SQUARES REGRESSIONS WHERE THE  
LENDER IS SPECIFIED FOR INDUSTRIAL FIRMS AND  
UTILITY FIRMS FOR ISSUE RELATED VARIABLES

Variable Equ.	Coefficient (t-stat)	Constant (t-stat)	R <sup>2</sup> (F)
SIZE			
1.1	.00 (.30)	12.49 (1.18)	.001 (.09)
1.2	.01 (1.09)	12.43 (.50)	.02 (1.20)
REL SIZE			
2.1	-3.14 (-2.56) <sup>a</sup>	30.07 (2.52) <sup>a</sup>	.02 (6.54) <sup>a</sup>
2.2	1.65 (.72)	19.35 (.79)	.01 (.52)
LOG MV			
3.1	-.01 (-.03)	14.11 (.51)	.001 (.001)
3.2	.06 (1.61)	-62.61 (-1.03)	.04 (2.59)
MAT			
4.1	-.02 (-.81)	24.40 (1.45)	.002 (.65)
4.2	.03 (.79)	7.63 (.22)	.01 (.63)
BETA			
5.1	.01 (.006)	13.29 (.61)	.001 (.001)
5.2	.65 (1.23)	-4.62 (-.14)	.02 (1.52)

participation in the public debt market, the importance of the relative size of the debt issue was diminished.

### Maturity Variables

The significant stock price response associated with announcements of private placements of debt may be attributable to the maturity of the issue. Easterbrook (1984) and Fama (1985) argue that firms which utilize short-term debt for their financing needs subject themselves to periodic evaluation by outside monitors, such as lenders and investment bankers. A firm's decision to commit to periodic evaluations can provide a positive signal regarding management's assessment of the firm's future earnings prospects. This would indicate an inverse relationship between the excess return and the maturity of the debt issue. Although private placements of debt are typically not renewed, the lender's ability to purchase common stock of the borrowing firm provides them with recourse similar to the renewal process associated with short-term debt. As a result, the inverse relationship between the maturity of the debt offering and the excess return may not occur.

To test the impact of the maturity of the debt issue, the maturity of the debt issue (MAT) is included in the regression model. The results for the maturity variable for industrial and utility firms are reported in equation 4.1 and 4.2. The coefficients for maturity are not significant

for either industrial or utility firms. These results are consistent with the argument that the lender's ability to purchase common stock provides them recourse similar to the renewal process associated with short-term debt.

### Risk Variables

The excess return associated with private placements of debt may be related to the risk of the firm issuing debt. Smith and Warner (1979) suggest that private placements are more likely to be used by riskier borrowing firms than public debt offerings. Myers and Majluf (1984) suggest that the stock price response to security offerings depends on the sensitivity of the value of the new securities to changes in firm value. The implication here is that the magnitude of the stock price response associated with private placements of debt may be inversely related to the risk of the borrowing firm. The beta estimated with the market model during the estimation period is included in the regression model as a proxy for the risk of the borrowing firm. Equation 5.1 and 5.2 report the results of the regression analysis for industrial and utility borrowing firms. The coefficients for the beta are not significant for both utility and industrial borrowing firms. This implies that factors other than the risk associated with the borrowing firm contribute to the stock price response

associated with private placements of debt where the lender is specified.

#### Insurance and Issue Related Variables

In order to determine the impact of issue related variables in private placements of debt which utilize reputable lenders, a dummy variable for private placements in which an insurance company is the primary lender is included in the regression model along with issue related variables for industrial and utility borrowing firms. Table XXIV presents the results of the regressions. According to equation 7.1, the coefficient estimate for the relative size of the issue for industrial borrowing firms is -2.99 and is significant at the .05 level, whereas the coefficient for insurance lenders is not significant. In equation 7.2, the coefficients representing both relative size and insurance lenders are not significant for utility borrowing firms. Furthermore, the insurance coefficient as well as the other issue related variables' coefficients besides relative size are not significant in any of the other regression models for both industrial and utility borrowing firms. Therefore, the regression results are not materially changed when variables indicating reputable lenders are included in the regression models.

### Special and Issue Related Variables

To test for the impact of prestigious investment banking firms in private placements of debt where the lender is specified, a dummy variable is included in the regression models which equals one if a Special category of investment banking firms is utilized in the private placement of debt. The relevant results of weighted least squares regressions are reported in Table XXV. For industrial borrowing firms, the coefficient for the relative size of the issue is the only significant variable in the regression models. This indicates that factors other than issue related variables associated with private placements which utilize prestigious investment banking firms contribute to the stock price response associated with private placements of debt where the lender is specified.

For utility borrowing firms the coefficients of the Special category of investment banking firms is negative and statistically significant in each of the regression models. This indicates that private placements by utility firms which utilize a prestigious investment banking firm have a negative impact on firm value. This result provides further support for the argument that utility regulation, rather than the certification and monitoring role of prestigious investment bankers helps alleviate information asymmetries associated with security issues by utilities. In equation 14.2, the Special coefficient is -1.09 and is significant at



TABLE XXIV

ESTIMATES OF WEIGHTED LEAST SQUARES REGRESSIONS WHERE THE  
LENDER IS SPECIFIED FOR INDUSTRIAL FIRMS AND UTILITY  
FIRMS FOR ISSUES RELATED VARIABLES AND A DUMMY  
VARIABLE REPRESENTING INSURANCE  
COMPANY LENDERS

Variable Equ.	Coefficient (t-stat)	Insurance (t-stat)	Constant (t-stat)	R <sup>2</sup> (F)
SIZE				
6.1	.00 (.71)	.38 (1.21)	1.24 (.09)	.005 (.78)
6.2	.006 (1.15)	.22 (.45)	4.86 (.16)	.02 (.69)
REL SIZE				
7.1	-2.99 (-2.42) <sup>b</sup>	.27 (.87)	21.45 (1.38)	.02 (3.6) <sup>b</sup>
7.2	1.79 (.76)	.18 (.37)	13.29 (.45)	.01 (.32)
LOG MV				
8.1	-.01 (-.46)	.42 (1.28)	13.75 (.49)	.005 (.81)
8.2	.06 (1.58)	-.01 (-1.02)	-62.54 (-1.02)	.04 (1.27)
MAT				
9.1	-.02 (-.65)	.34 (1.09)	12.39 (.61)	.01 (.92)
9.2	.03 (.77)	.09 (.19)	5.50 (.15)	.01 (.33)
BETA				
10.1	-.04 (-.13)	.37 (1.20)	5.12 (.22)	.01 (.72)
10.2	.66 (1.19)	-.05 (-.10)	-4.08 (-.12)	.02 (.75)

TABLE XXV

ESTIMATES OF WEIGHTED LEAST SQUARES REGRESSIONS WHERE THE  
LENDER IS SPECIFIED FOR INDUSTRIAL FIRMS AND UTILITY  
FIRMS FOR ISSUE RELATED VARIABLES AND A DUMMY  
VARIABLE REPRESENTING THE SPECIAL CATEGORY  
OF INVESTMENT BANKING FIRMS

Variable Equ.	Coefficient (t-stat)	Special (t-stat)	Constant (t-stat)	R <sup>2</sup> (F)
SIZE				
11.1	-.01 (-.28)	.55 (1.32)	6.72 (.59)	.006 (.92)
11.2	.01 (1.57)	-1.04 (-2.27) <sup>b</sup>	35.99 (1.37)	.10 <sup>b</sup> (3.2) <sup>b</sup>
REL SIZE				
12.1	-3.10 (-2.52) <sup>a</sup>	.48 (1.27)	23.25 (1.78) <sup>c</sup>	.03 <sup>b</sup> (4.1) <sup>b</sup>
12.2	1.44 (.64)	-.88 (-1.93) <sup>c</sup>	47.25 (1.69) <sup>c</sup>	.07 (2.13)
LOG MV				
13.1	-.008 (-.36)	.53 (1.37)	15.55 (.56)	.006 (.94)
13.2	.08 (2.13) <sup>b</sup>	-1.09 (-2.42) <sup>b</sup>	-58.18 (-.99)	.13 <sup>b</sup> (4.3) <sup>b</sup>
MAT				
14.1	-.02 (-1.01)	.55 (1.46)	11.56 (1.13)	.009 (1.39)
14.2	.04 (1.20)	-.99 (-2.16) <sup>b</sup>	26.20 (.76)	.08 <sup>c</sup> (2.6) <sup>c</sup>
BETA				
15.1	-.10 (-.31)	.53 (1.36)	12.16 (.56)	.006 (.92)
15.2	.37 (.67)	-.79 (-1.95) <sup>c</sup>	34.62 (.84)	.07 (2.15)

the .05 level and the coefficient for LOG MV is +.08 and is also significant at the .05 level. This is consistent with the argument that utility regulation helps to reduce information asymmetries, although private placements by larger utilities have a favorable effect on firm value.

### Insurance, Special, and Issue

#### Related Variables

In order to determine the relative importance of prestigious investment banking firms and reputable lenders, a dummy variable is included in the regression models for private placements which utilize the Special category of investment bankers and a dummy variable is included for private placements where the primary lender is an insurance company. Table XXVI presents the results of regression analysis. For industrial borrowing firms, the only variable that is significant in the regression models is relative size. For utility borrowing firms, the coefficient of the insurance company variable is not statistically significant in any of the regression models. Furthermore, the coefficient estimate for Special is negative and statistically significant in each of the regression models for utility borrowing firms. These results provide further support for the argument that utility regulation helps reduce information asymmetries associated with security issues.

TABLE XXVI

ESTIMATES OF WEIGHTED LEAST SQUARES REGRESSIONS WHERE THE LENDER IS SPECIFIED FOR INDUSTRIAL FIRMS AND UTILITY FIRMS FOR ISSUE RELATED VARIABLES AND A DUMMY VARIABLE REPRESENTING INSURANCE COMPANY LENDERS AND A DUMMY VARIABLE REPRESENTING THE SPECIAL CATEGORY OF INVESTMENT BANKING FIRM CATEGORIES

Variable Equ.	Coefficient (t-stat)	Insurance (t-stat)	Special (t-stat)	Constant (t-stat)	R <sup>2</sup> (F)
SIZE					
16.1	-.01 (-.28)	.44 (1.42)	.63 (1.51)	-7.45 (-.49)	.01 (1.28)
16.2	.007 (1.55)	.02 (.05)	-1.03 (-2.21) <sup>b</sup>	35.11 (1.09)	.10 (2.12)
REL SIZE					
17.1	-2.92 (-2.32) <sup>b</sup>	.34 (1.09)	.54 (1.43)	11.35 (.67)	.03 (3.1) <sup>b</sup>
17.2	1.42 (.61)	-.03 (-.06)	-.88 (-1.87) <sup>c</sup>	48.40 (1.40)	.07 (1.39)
LOG MV					
18.1	-.03 (-1.00)	.58 (1.70) <sup>c</sup>	.71 (1.77) <sup>c</sup>	15.53 (.56)	.02 (1.59)
18.2	.08 (2.22) <sup>b</sup>	-.32 (-.67)	-1.17 (-2.50) <sup>b</sup>	-55.58 (-.94)	.13 (3.0) <sup>b</sup>
MAT					
19.1	-.02 (-.85)	.41 (1.31)	.63 (1.63)	4.41 (.21)	.01 (1.50)
19.2	.04 (1.22)	-.15 (-.32)	-1.03 (2.16) <sup>b</sup>	30.44 (.82)	.08 (1.79)
BETA					
20.1	-.17 (-.54)	.47 (1.49)	.64 (1.62)	12.16 (.07)	.006 (1.36)
20.2	.41 (.73)	-.16 (-.34)	-.81 (-1.67) <sup>c</sup>	37.56 (.89)	.07 (1.45)

## CHAPTER V

### SUMMARY AND CONCLUSIONS

#### Summary of Empirical Results

This study investigates the stock price response associated with announcements of private placements of debt. The excess return associated with announcements of private placements of debt where the lender is specified is +.38% with a Z-statistic of 2.33 which is significantly different from zero at the .01 level. Although the excess return for private placements where no lender is identified in the private placement announcement is +.07%, it is not significant. These results indicate that borrowing firms that specify the lender participating in the private placement avoid the non-positive stock price response associated with public debt offerings noted by Eckbo (1986), Mikkelson and Partch (1986) and Dann and Mikkelson (1984). The findings of this study are also in sharp contrast to the negative stock price response associated with private placements of debt where no emphasis was placed on the borrowing firm or lender participating in the private placement documented by Mikkelson and Partch (1986) and James (1987). Therefore, the results of this study indicate

that announcements of private placements of debt which specify participating lenders convey favorable information about borrowing firms to the capital market.

The positive excess return associated with private placements of debt in which the lender is specified provides support for the argument that high quality borrowing firm's may signal their true value by placing debt privately with reputable lenders. Lenders are given access to private information about the borrowing firm during the private placement process. Completion of the private placement indicates that a reputable lender is willing to provide capital to the borrowing firm, thus providing a signal of their confidence in the future financial prospects of the borrowing firm. These results are also consistent with the argument that there is increased monitoring resulting from the private placement, particularly given that a specified lender is performing monitoring activities.

Although the excess return associated with the full sample of private placements by utility borrowing firms is +.45% which is significant at the .05 level, there is no statistically significant difference between private placements by utility borrowing firms where the lender is specified and where no lender is specified. These results are consistent with the findings of Szewczyk and Varma (1991) and provides further support for the argument that utility regulation, rather than the role of the lender,

helps reduce information asymmetries associated with security offerings by utility firms.

One possible explanation for the positive excess return associated with private placements of debt in which the lender is specified is that the market perceives that particular categories of lenders participating in the private placement provide a stronger signal regarding firm value relative to other lenders. An analysis of the stock response associated with private placements of debt where the lender is an insurance company, pension fund, or financial firm indicates that the significantly positive excess return noted in the full sample is primarily attributable to private placements in which the lender is an insurance company. The excess return resulting from announcements of private placements of debt where an insurance company is the lender is +.40% with a Z-statistic of 2.15 which is statistically significant at the .05 level.

We conclude that insurance companies have developed a reputation of providing effective monitoring and certification services due to their expertise in the private placement debt market. Insurance companies may also purchase shares of the borrowing firm's common stock and thus affect the firm's activities throughout the loan. This provides insurance companies with additional recourse relative to other lenders in private placements who may face restrictions on the amount and type of securities that they may purchase. Therefore, announcements of private

placements which identify an insurance company as the lender convey positive information about the value of the borrowing firm as a result of the reputation of insurance companies as lenders in private placements of debt.

The excess return associated with private placements which specify two participating lenders (LEND2) is 1.16% which is significant at the .05 level. However, when industrial and utility borrowing firms are analyzed separately, the excess return associated with LEND2 subsamples are not significant. The excess returns for other multiple lender categories are also not significant. Given the mixed results associated with multiple lenders in private placements and the positive stock price response for when the lender is a single insurance company, we conclude that the reputation of the lender rather than the number of lenders is the more important factor contributing to the stock price response for private placements of debt where the lender is specified.

Another possible explanation for the stock price response associated with private placements of debt is the monitoring and certification role of investment bankers. The excess return for the full sample of private placements which specified a prestigious investment banker is +.14% which is not statistically significant. However, the stock price response associated with private placements of debt by industrial borrowing firms which specified an insurance company and a prestigious investment banking firm is +1.48%



which is significant at the .01 level. This indicates that the monitoring and certification role of reputable investment bankers and reputable lenders helps reduce information asymmetries associated with security offerings. Finally, the excess returns associated with subsamples of lenders and investment banking firm categories for private placements by utility firms are not significant. This result provides support for the argument that utility regulation, rather than monitoring and certification by a reputable lender and/or a reputable investment banking firm helps reduce information asymmetries associated with security offerings by utilities.

Regression analysis indicates a significantly negative relationship between the excess return associated with private placements by utility borrowing firm's and a dummy variable representing the Special category of investment bankers. This result supports the argument that utility regulation helps reduce information asymmetries associated with private placements of debt by utility firms. The results of regression analysis for industrial borrowing firms indicate a negative relationship between the excess return and the relative size of the debt issue. This result is puzzling given that a priori a positive relationship was expected for size variables and the excess return associated with private placements of debt by industrial firms where the lender is specified. This implies that other factors associated with the debt issue, such as risk factors or

potential agency problems resulting from the debt issue, are not captured in the regression model. These issues will be considered further in future research.

#### Implications for Future Research

The significantly positive excess return associated with private placements of debt in which the lender is specified has implications for future research regarding private placements of other types of securities, such as preferred stock, convertible debt, convertible preferred stock, and common stock. Although Wruck (1989) found a positive excess return associated with announcements of private placements of common stock and Fields and Mais (1991) found a positive excess return associated with announcements of private placements of convertible debt, the focus of these studies was on the stock price response associated with private placements of particular types of securities, with no emphasis placed on the role of the lender participating in the private placement. If the market perceives that the lender specified in the private placement announcement conveys positive information regarding the future prospects of the borrowing firm, then a positive stock price response would be expected to be associated with private placements of other types of securities.

In a related context the positive excess return associated with private placements in which an insurance

company is the primary lender has implications for future research. One possible explanation for the significant excess return regards the expertise and unique role of insurance companies in the private placement debt market. Further research is necessary to identify that unique service or role of insurance companies in private placements of debt and to explain its relation to the market value of the firm. Moreover, the wealth impact associated with other types of security offerings in which insurance companies are the primary lenders should also be examined in order to determine whether the excess return associated with insurance companies is attributable to their role in the private placement market or is unique to their participation in private placements of debt.

The results of this study also have implications for future research regarding the wealth impact associated with announcements of bank loans. James (1987) provides evidence that banks provide some special service associated with their lending activity that is not available from other lenders. Lummer and McConnell (1989) suggest that announcements of bank loans send a positive signal to the capital market as a result of a continuing relationship between the bank and the borrowing firm which is developed over time. However, neither of these studies examined the role of the number of banks providing funds to borrowing firms. A positive excess return associated with announcements of bank loans which specify two participating

lenders would provide support for the argument that two banks are providing quality certification of the borrowing firm, thus sending a positive signal to the market regarding the future prospects of the borrowing firm. Moreover, a positive stock price response would also provide support for the argument that there is increased monitoring associated with announcements of bank loans which specify two lenders, because more than one specified bank is providing monitoring activities.

In a related context, the impact of the number of lenders participating in private placements of other types of security offerings should also be examined. A positive excess return associated with private placements of other types of securities which specify two participating lenders would provide further support for the argument that completion of the private placement conveys positive information regarding the borrowing firm to the capital market.

Finally, the role of investment bankers in private placement offerings should be examined in future research. Slovin, Sushka, and Hudson (1990) and Hansen and Torregrosa (1992) suggest that monitoring and certification services by reputable lenders help reduce information asymmetries associated with security offerings. Although there is a positive excess return associated with private placement by industrial borrowing firms which utilize a reputable lender and prestigious investment banker, the results associated

with the impact of investment banking firm categories are not conclusive. Therefore, further research is necessary to determine the impact of the monitoring and certification roles of investment banking firms in private placement offerings.

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