

# **CEO REPUTATIONS AND DIVIDEND PAYOUTS**

**Danai Likitratcharoen**

**A Dissertation Submitted in Partial  
Fulfillment of the Requirements for the Degree of  
Doctor of Philosophy (Finance)  
School of Business Administration  
National Institute of Development Administration**

**2011**

# **CEO REPUTATIONS AND DIVIDEND PAYOUTS**

**Danai Likitratcharoen**

**School of Business Administration**

Associate Professor ..... Major Advisor  
(Tatchawan Kanitpong, Ph.D.)

Associate Professor ..... Co-Advisor  
(Pornsit Jiraporn, Ph.D.)

The Examining Committee Approved This Dissertation Submitted in Partial  
Fulfillment of the Requirements for the Degree of Doctor of Philosophy (Finance).

Assistant Professor ..... Committee Chairperson  
(Viput Ongsakul, Ph.D.)

Doctor ..... Committee  
(Pandej Chintrakarn, Ph.D.)

Associate Professor ..... Committee  
(Tatchawan Kanitpong, Ph.D.)

Associate Professor ..... Committee  
(Pornsit Jiraporn, Ph.D.)

Associate Professor ..... Dean  
(Boonchai Hongcharu, Ph.D.)

April 2012

## ABSTRACT

<b>Title of Dissertation</b>	CEO Reputations and Dividend Payouts
<b>Author</b>	Danai Likitratcharoen
<b>Degree</b>	Doctor of Philosophy (Finance)
<b>Year</b>	2012

---

Over the past decades, there have been numerous discussions about the influence of dividend policy and the value of firms. In many of the literature in this field, frameworks have been developed to show that dividend policy has implications for firms' value in the imperfect and inefficient capital markets. If dividend policy has an influence on the firm's value, then it is worth exploring the factors that have an influence on dividend policy. Past literature has found a large number of firm-specific variables as the determinants of dividend policy. The purpose of this research is to test the association between CEO reputation and the dividend payments of corporations while controlling for firm size, market-to-book ratio, leverage, R&D spending, capital expenditures, CEO tenure, year dummies, and industry dummies. Using press coverage (media counts) to proxy for CEO reputation, this study conducts empirical tests and finds that firms with reputable CEOs tend to make more investment in R&D and tend to pay lower dividends. The logistic regression shows that firms with more reputable CEOs are less likely to payout dividends.

## **ACKNOWLEDGEMENTS**

I would like to thank the many people who have made this thesis possible.

First of all, I am indebted to my advisors, Associate Professor Dr. Pornsit Jiraporn and Associate Professor Dr. Tatchawan Kanitpong, for their encouragements and guidance throughout my thesis-writing period.

I also wish to thank the rest of my thesis committee, Assistant Professor Dr. Viput Ongsakul and Dr. Pandej Chintrakarn, for their insightful comments.

My warm and sincere gratitude goes to my best friend, Vesarach Aumeboonsuke for helping me get through the difficult times, for all the emotional support, and for assisting me in many different ways.

I am grateful to my teachers at NIDA for teaching me, giving me excellent concepts in finance, and providing me with many good ideas for doing research in finance area.

Lastly, and most importantly, I owe my loving thanks my parents for giving birth to me at the first place and supporting me in every way throughout my life.

Danai Likitratcharoen

April 2012

## TABLE OF CONTENTS

	<b>Page</b>
<b>ABSTRACT</b>	iii
<b>ACKNOWLEDGEMENTS</b>	iv
<b>TABLE OF CONTENTS</b>	v
<b>LIST OF TABLES</b>	vi
<b>CHAPTER 1 INTRODUCTION</b>	1
<b>CHAPTER 2 LITERATURE REVIEW</b>	5
2.1 Literature Related to Dividend Policy	5
2.1.1 Signaling	5
2.1.2 Agency Models	8
2.1.3 Catering Theory	11
2.2 Literature Related to CEO'S Reputation	13
<b>CHAPTER 3 HYPOTHESIS</b>	15
3.1 The Irrelevance Hypothesis	15
3.2 The Investment Hypothesis	15
3.3 The Reputation Hypothesis	16
<b>CHAPTER 4 SAMPLE AND DATA</b>	18
<b>CHAPTER 5 METHODOLOGY</b>	23
5.1 Tobit Regression	24
5.2 Logistic Regression	25
<b>CHAPTER 6 RESULTS</b>	27
<b>CHAPTER 7 CONCLUSION</b>	75
<b>BIBLIOGRAPHY</b>	76
<b>APPENDIX The STATA Code</b>	84
<b>BIOGRAPHY</b>	86

## LIST OF TABLES

<b>Tables</b>	<b>Page</b>
4.1 Sample Distribution	19
4.2 Descriptive Statistics of Firm Characteristics	22
4.3 Descriptive Statistics of Dividend Payout Dummy Variable	22
5.1 Definition of Each Variable in Equation 1, 2, and 3.	23
6.1 Analysis of Variance	27
6.2 Two-Sample T-Test with Unequal Variances	28
6.3 Tobit Regression of Dividend to Total Assets on CEO's Reputation	29
6.4 Tobit Regression of Dividend to Sales on CEO's Reputation	33
6.5 Logit Regression of Dividend Payout Dummy on CEO's Reputation	36
6.6 Marginal Effects after Logit Regression of Dividend Payout Dummy	41
6.7 Logit Regression of Dividend Payout Dummy on CEO's Reputation (Panel Data)	51
6.8 Marginal Effects after Logit Regression of Dividend Payout Dummy (Panel Data)	54
6.9 Logit Regression of Dividend Payout Dummy on CEO's Reputation (Fixed-Effect & Panel Data)	57
6.10 Linear Regression of Dividend to Total Assets on CEO's Reputation	59
6.11 Linear Regression of Dividend to Sales on CEO's Reputation	60
6.12 The Variance Inflation Factor (VIF) Check for Multicollinearity	61
6.13 Tobit Regression of Dividend to Total Assets on Log of CEO's Reputation	62
6.14 Tobit Regression of Dividend to Sales on Log of CEO's Reputation	65
6.15 Logit Regression of Dividend Payout Dummy on Log of CEO's Reputation	68
6.16 Linear Regression of Dividend to Total Assets on Log of CEO's Reputation	73
6.17 Linear Regression of Dividend to Sales on Log of CEO's Reputation	74

## **CHAPTER 1**

### **INTRODUCTION**

Over the past decades, there have been numerous discussions about the influence of dividend policy and the value of firms. Miller and Modigliani (1961), for example, have proposed the dividend invariance hypothesis, which illustrates that the only determinant of a firm's value is its investment policy, and the firm's dividend policy has no association with the firm's value in perfect and efficient capital markets. They have shown by using arbitrage argument that rational investors will be indifferent between dividends and capital gain.

On the other hand, in some of the literature in this field, frameworks have been developed to show that dividend policy has implications for firms' value if the perfect and efficient capital markets assumptions are relaxed; for example, much of the literature on payout policy focuses on the importance of taxes. The basic aim of the tax-related literature on dividends has been to investigate whether there is a tax effect. If dividend income is taxed at a higher rate compared to the capital gains from stock price appreciations, then the firms that pay out high dividends should be less valuable than firms that pay out lower dividends.

In addition, if we relax the perfect capital market assumption and assume instead that the capital markets are imperfect in terms of information structure, then many researchers (Bhattacharya, 1979; Miller and Rock, 1985) suggest that when insiders have better information about the firm's future cash flows, dividends might convey information about the firm's prospects or they may be used as a costly signal to change market perceptions concerning future earnings prospects.

Furthermore, past literature on agency models has stated that a conflict of interest might arise between the three groups that are most likely to be affected by a firm's dividend policy; namely, the stockholders, management, and bondholders. The first conflict of interest that could affect dividend policy is between management and

stockholders. As suggested by Jensen and Meckling (1976), managers of a publicly held firm could allocate resources to activities that benefit them but that are not in the shareholders' best interest. These activities can range from lavish expenses for corporate jets to unjustifiable acquisitions and expansions. In other words, too much cash in the firm may result in overinvestment. Easterbrook (1984) and Jensen (1986) have suggested a partial solution to this problem—shareholders can minimize the cash that management controls by increasing the level of payout. This agency framework suggests that firms paying out more dividends should have higher value than firms paying out fewer dividends.

If dividend policy has an influence on the firm's value, then it is worth exploring the factors that have an influence on dividend policy. Past literature has found a large number of firm-specific variables as the determinants of dividend policy, such as firm size, market-to-book ratio, leverage, R&D spending, capital expenditures, CEO tenure, and year and industry dummies.

There are several arguments justifying the positive relationship between firm size and dividend payout. For instance, according to Redding (1997), the dividend policy of firms is determined by the preferences of the stockholders: large institutional investors choose to invest in large corporations because it lowers their transaction costs. Since these institutions prefer dividends, the large corporations choose to pay dividends, while the small corporations, owned by individuals, do not. The results from Redding's (1997) work show that firm size well explains the decision of whether to pay dividends, whereas existing informational explanations (such as monitoring and signaling) explain the level of dividends. Holder, Langrehr, and Hexter (1998) and Twite (2001) propose that larger firms enjoy a better access to the capital market and, consequently, are less financially constrained, which allows them to pay more dividends. Additionally, Barclay, Smith, and Watts (1995) suggest that larger firms are usually mature firms with limited growth opportunities that are prone to paying more dividends in order to avoid overinvestment. Accordingly, Fama and French (2001) provide evidence that the largest US companies have a higher payout ratio, and more recently, Denis and Osobov (2005) show that there is the positive association between the likelihood of paying dividends and the firm size.

According to Myers (1977), Market-to-book ratio, R&D spending, and capital expenditures can serve as a proxy for growth opportunity. High market-to-book ratio, high R&D, and high capital expenditures imply that firms have high growth opportunity. As a result, firms with high market-to-book ratio, high R&D, and high capital expenditures should pay fewer dividends because they have to retain more internal funds to finance growth opportunity.

A negative association between a firm's leverage and its dividend payout is widely supported by financial literature namely Grossman and Hart (1980), Rozeff (1982), Jensen (1986), and Jensen, Solberg, and Zorn (1992). As debt obligations and dividend payouts can both be used as a way to control free cash flow or to send signal to investors, these types of payouts are substitutes. In another word, debt and dividends are agency-cost control mechanisms as well as by mitigating asymmetries of information between firms and potential investors. (Ross, 1977; Harris & Raviv 1991, and Bhattacharya, 1979) This search for a trade-off between costs and benefits leads to a substitution hypothesis based on the minimization of agency conflicts. Therefore, firms with high leverage are expected to have less dividend payout.

According to Hu and Kumar (2004), CEO tenure can be also used as a proxy for managerial entrenchment. This entrenchment can be defined as the likelihood of a manager to opt for concentrated power. These authors find that both the likelihood and the level of dividend payouts are significantly and positively (negatively) related to the factors that increase (decrease) executive entrenchment levels, even when controlling for firm characteristics, such as firm size, leverage, book-to-market ratio, and the proportion of tangible to total assets.

Year and industry dummies have also been used as additional control variables in order to test whether the association between dividend payout and explanatory variables is constant across industries and over time. Besides the explanatory variables mentioned above, this paper adds one more explanatory variable—that is, CEO reputation. The reason that this study includes CEO reputation is motivated by three considerations. First, CEO reputation is one of the most important intangible assets that a firm has (Gaines-Ross, 2003) second, it captures the dimension of managerial human capital (Francis, Huang, Rajgopal and Zang, 2008) and last, according to Burson-Marsteller's survey in 1999, almost half of a firm's reputation is

based upon the image of its CEO. Thus, this CEO characteristic can potentially have an impact on corporate policies. As a result, the purpose of this research is to test the association between CEO reputation and the dividend payments of corporations while controlling for firm size, market-to-book ratio, leverage, R&D spending, capital expenditures, CEO tenure, year dummies, and industry dummies.

The contributions of this paper are as follows. First, the evidence presented in this study will reveal whether CEO reputation—a manager-specific characteristic—will affect the firm's dividend policy or not. Second, this study is related to the literature in behavioral finance and will test whether CEOs that enjoy a strong reputation will make more investment or not. The behavioral decision theory predicts that overconfident CEOs are inclined to take more risks (Nosic and Weber, 2010; Gao and Sudarsanam, 2005). For this reason, these overconfident CEOs tend to pay out fewer dividends and to retain more funds for future investment opportunities because they are confident that they will be able to get a higher rate of return from future investments and that the investments they make will contribute to higher growth for the firm compared to the scenario in which the firm pays out dividends. Third, whether reputable CEOs use internal funds for fixed investments or R&D investments will be tested in this study.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Literature Related to Dividend Policy**

##### **2.1.1 Signaling**

Because capital markets are imperfect, information asymmetry exists between managers (insiders) and outside investors. If managers have better information about firms' future cash flows, it has been suggested by many researchers that dividends might convey information about these firms' prospects, and dividends may be used as a costly signal to change market perceptions concerning future earnings prospects.

If it is assumed that the source of funds for the firm is equal to the use of funds and that the firm's investment is known, dividend announcements could convey information about current earnings (and about future earnings if they are serially correlated) because the firm's earnings are equal to investment plus dividends. In this way, dividends that are larger than expected imply higher earnings, and since the market does not necessarily know the current level of earnings, these higher-than-anticipated earnings will lead to a positive stock price increase. The most well-known work that has developed this concept of signaling models is that of Bhattacharya, 1979; Miller and Rock, 1985; and John and Williams, 1985. The basic idea in all of these models is that firms adjust dividends to signal prospects—a rise in dividends will signal that the firm will perform better and a decrease suggests that it will perform less well.

In Bhattacharya's (1979) two-period model, at time zero, the managers invest in a project; they know the expected profitability of this investment but investors do not. The managers also commit to a dividend policy. Then at time 1, the "project generates a payoff that is used to pay the dividends committed to at time zero." A crucial assumption of this model is that if the payoff is not sufficient in terms of covering the dividends, the firm must raise external funds and this will result in

transaction costs for the firm. At time zero, the managers can signal that the firm's project is good by committing to a large dividend at time 1; and if a firm does have a good project, it will likely be able to pay the dividend without this resorting outside financing and therefore will not have to incur any transaction costs associated with the action. It is not a good idea, however, for a firm that has a bad project to do this because it will have to resort to outside financing more frequently and will then have to suffer from higher transaction costs.

Miller and Rock (1985) have also created a two-period model, and in this model, when firms invest in a project at time zero, their profitability will not be observed by investors. At time 1, the project produces earnings and the firm uses these earnings to finance its dividend payment and new investment. Investors will not be able to observe either earnings or the new level of investment. At time 2, on the other hand, the investments of firms again produce earnings. A critical assumption of the model is that these earnings will be correlated through time. This thus implies that the firm has a good reason to make shareholders believe that the earnings at time 1 are high and in this way shareholders who sell will receive a high price. Since both earnings and investment are unobservable, a firm that does not perform well can make others believe that it has high earnings by cutting its investment and instead paying out high dividends. A good firm must pay a level of dividends that is sufficiently high so that it will be perceived as unprofitable for bad firms to reduce their investment sufficiently to achieve the same level of dividends.

In Bhattacharya's (1979) the dissipative cost that allows signaling to occur is the transaction cost of having to rely on outside financing. Bhattacharya posits that the dissipative costs arise because increasing dividend payout forces the firm into the capital market more frequently, thus resulting in increased financing costs. In Miller and Rock's (1985) model, on the other hand, dissipative costs stem from the distortion in the firm's investment decisions. John and Williams (1985) have presented a model in which taxes represent dissipative cost, and as a consequence, the theory adequately addresses the criticism that the same signal can be achieved at a lower cost if the firm instead repurchases shares. While Miller and Rock's and Bhattacharya's models suggest that dividends and repurchases are good substitutes for share repurchases, John and Williams' model suggests that dividends and repurchases are not related; in

the words of Allen and Michaely (2002), “[a] firm cannot achieve its objective of higher valuation by substituting a dollar of dividends for a dollar of capital gains.”

A number of theories with multiple signals have been developed after Miller and Rock’s (1985) and John and Williams’ (1985) work. Ambarish, John, and Williams (1987), for example, constructed a single-period model with dividends, investment, and stock repurchases. Bernheim (1991) also provided a theory of dividends, according to this theory, signaling happens because dividends are taxed more heavily than repurchases. In his model, the amount of taxes paid is controlled by the firm by varying the proportion of total payout in the form of dividends rather than in the form of repurchases—a good firm can choose an optimal amount of taxes in providing the signal.

A different approach to dividend signaling was taken by Allen, Bernardo, and Welch (2000). As in the previous models, dividends are seen as a signal of positive information (undervaluation). In their model, however, firms pay dividends because they are interested in attracting a clientele that has a better grasp of the reality of the situation. In this case, untaxed institutions, for example, pension funds and mutual funds, will be the primary holders of dividend-paying stocks because they represent a tax-disadvantaged payout method for other stockholders.

Another reason that institutions hold dividend-paying stocks concerns restrictions in institutional charters, such as the “prudent man” rules that make it difficult for many institutions to purchase stocks that pay either no dividends or low dividends. According Allen, Bernardo, and Welsh (2000), the reason that good firms like institutions to hold their stock is that these stockholders have a better understanding of firm quality and possess an advantage in knowing when a firm is of high quality. The low-quality firms do not have the incentive to copy the behavior of other firms because they do not want their true worth to be shown. As a result, taxable dividends are desirable because they allow the management of firms to demonstrate the good quality of their firms.

One other interesting aspect of the Allen, Bernardo, and Welch’s model is that it takes into consideration dividend “smoothing;” that is, firms that pay dividends are unlikely to reduce the amount of the dividend because their clientele (institutions) will respond negatively. For this reason dividends are kept relatively smooth.

Grullon, Michaely, and Swaminathan (2002) have presented an alternative explanation of the reason why stock price increases when a firm pays more dividends. They refer to this as the “maturity hypothesis,” in which they propose that there are several elements contributing to the maturation of firms. For example, as firms mature, their investment opportunities shrink and this results in a potential decline in future profitability. The most important result of firms becoming mature, however, is the change in its risk characteristics, and specifically in the decline of risk—a decline in risk most likely occurs because firms’ current “assets in place” have become less risky or because they exhibit fewer growth opportunities. In the end, a decline in investment opportunities will generate an increase in free cash flows and this will lead to an increase in dividends. It is for this reason that a dividend increase indicates that a firm has matured.

According to the maturity hypothesis, dividends are increased by firms when growth opportunities decline, thus leading to a decrease in systematic risk and profitability of the firm. The market will then perceive this dividend increase from two points of view: that is, that the risk has decreased, and that profits are going to decline. If the market reaction is positive, the idea of risk will dominate news about profitability.

### **2.1.2 Agency Models**

Another explanation of why stock price increases when a firm pays out more dividends is that investors will treat dividend increases positively because of agency considerations in spite of declining profitability. If investors expect managers to consume a firm’s wealth by overinvesting, for example, then a dividend increase suggest that managers will have the inclination to act more responsibly. In addition to this positive information concerning risk reduction, investors might interpret a dividend increase in a positive light as they reduce overinvestment problems; stock prices will then increase.

According to the literature, three groups are most likely to be affected by a firm’s dividend policy: stockholders, management, and bondholders. The first conflict of interest that can affect dividend policy is between management and stockholders (the separation of ownership and control). As suggested by Jensen and Meckling

(1976), the stockholders own the firm whereas the managers control the firm. Ideally, the managers should act according to the stockholders' best interests however, in reality the managers of a publicly-held firm could allocate resources to the activities that benefit them but that are not in the shareholders' best interest. These activities can range from expensive acquisitions such as jets to items that are more questionable. In addition, the managers may invest in many unprofitable or unrelated projects just to expand the firm size and secure their job positions or to fulfill their personal interests. In other words, too much cash in the firm can end in overinvestment.

Grossman and Hart (1980), Easterbrook (1984), and Jensen (1986) have suggested a partial solution to this problem: if stockholders can minimize the cash controlled by management, they can make it much more difficult for management to continue to spend money in an unmonitored fashion; and the less discretionary money that management has, the more difficult it will be for them to invest in negative NPV projects. According to some of advanced in the literature, one way to remove unnecessary cash from the firm is to increase the level of payout; these theories suggest a significant departure from the original assumption by Miller and Modigliani in the sense that payout policy and investment policy are interrelated—paying out cash would increase the value of the firm by reducing potential overinvestment.

One drawback of these theories is that they fail to explain why firms pay out in the form of dividends instead of share repurchases, since share repurchases are a cheaper way to remove money from management. Another related question is the following: why should management be monitored through payout and not through debt? As Grossman and Hart (1980) and Jensen (1986) have argued, a mechanism that would be more effective in achieving this goal would be to increase the level of debt: it is more difficult for management to go back on a debt commitment than on a dividend commitment. This argument can also be related to the choice of dividends versus repurchases. If it is assumed that the market strongly dislikes dividend reductions, and that management is therefore reluctant to reduce dividends, then it can be seen that dividends represent a more effective mechanism than repurchases in terms of imposing discipline.

The second drawback of Agency Theory is that, although it offers a good explanation of dividend increases, as stated in the literature for example by Grossman

and Hart (1980), Easterbrook (1984), and Jensen (1986), this explanation does not apply as well to dividend decreases. Firms increase dividends when they have free cash flow, and a positive market reaction to a dividend announcement can occur because the market realizes that management will have to be more disciplined in its action. Further, concerning dividend cuts, one possibility is that management can cut dividends when cash flow falls; hence there should be a positive market reaction to the announcement of dividend cuts due to the decrease in free cash flows (because the decrease in free cash flows will force the manager to be more disciplined). Another possibility is for management to cut dividends when there is good investment; in this way, the cut would also be greeted in a positive way by the market. This situation does not happen frequently, however, because in this case good investments could be financed by debt.

The work of Allen, Bernardo and Welch (2000) provide a framework that can partially solve the first problem; i.e. dividends as opposed to repurchases. If some large shareholders view the tax treatment of dividends in a positive light, for example corporations, then it would be possible for dividends to be paid in order to attract this type of investors. In fact, Allen, Bernardo, and Welch (2000) have extended this analysis and have demonstrated that a favorable tax rate for institutions in relation to individuals will encourage large shareholders to prefer dividend-paying stocks. This view of clientele effect can then include not only corporations but also various types of institutions that are not subject to taxation.

These low tax-bracket investors will increase the value to all shareholders since they monitors management and thereby increase firm value. A question of whether large shareholders are attracted to firms that pay dividends is an unresolved empirical issue.

Apart from the first conflict of interest, which is between shareholders and managers, the second conflict of interest that may be affected by payout policy is between stockholders and bondholders. As Myers (1977) and Jensen and Meckling (1976) have argued, there are some situations in which equityholders might try to expropriate wealth from debtholders. This wealth expropriation could come in the form of excessive and unanticipated dividend payments. Shareholders can reduce investments and thereby increase dividends (investment-financed dividends), or they

can raise debt to finance the dividends (debt-financed dividends). In both cases, if debtholders do not anticipate the shareholders' action, then the market value of debt will go down and the market value of equity will rise.

### **2.1.3 Catering Theory**

The more recent finance literatures attempt to model the dividend payout by incorporating the psychological component and proposed that an important part of the firm's decision to pay dividends may be due to a firm's desire to satisfy investors' expectations. For instance, Shefrin and Statman (1984) develop the "behavioural life cycle" theory of dividends, which relies on psychological reasons to explain why investors prefer dividends rather than capital gains. Feldstein and Green (1983) find that dividend policy is affected by investors' consumption needs. Polk and Sapienza (2004) and Baker, Stein, and Wurgler (2003) also rely on behavioral explanations to explain the clientele effect.

One of the most popular literatures that consider the principles of behavioral finance in the dividend payout is a catering theory of dividends developed by Baker and Wurgler (2004a), which proposed that firms cater to their investors' preferences so that they pay dividends when dividend payers trade a premium and do not pay dividends when dividend payers trade a discount. According to Baker and Wurgler (2004a), the difference between the catering theory and the clientele theory is that the clientele theory does not explore dividends through the investors' sentiments, whereas the catering theory does. Moreover, the clientele focuses more on the firm level but the catering theory focuses more on the global level of dividends as the result of the demand for shares that pay dividends.

Baker and Wurgler (2004b) provide empirical evidence to support their theory. They show that changes in the proportion of the dividend-payer firms along the time can be explained in terms of the catering incentives. Catering incentives is a measure of the market desire for dividend-paying stocks. They also find a connection between the tendency to pay dividends and catering incentives. In their work, the dividends premium is used as a proxy for the value that the market places on dividends i.e., the premium that the investors are willing to pay for dividends-paying stocks.

Baker and Wurgler (2004b) measure the relative investors' sentiment about dividend paying firms by using the difference between the logarithm of the book-value-weighted average market-to-book ratio for dividend payers and the book-value-weighted average market-to-book ratio for non-payers. They find a positive relationship between the catering incentives (the dividend premium) and the change in firms' propensity to pay dividends.

There have been many studies providing the empirical evidence to support this theory. Bulan et al. (2005) presents evidence consistent with the dividend catering theory by showing that the timing of dividend initiation is affected by the investors' sentiment, measured by the dividend premium. The firms that have higher dividend premium are more likely to initiate dividend than the firms with lower dividend premium. Additionally, Denis and Osobov (2005) provide the time series evidence on the propensity to pay dividend in several developed financial markets in civil law countries (France, Japan, Germany) and common law countries (U.S., Canada, and United Kingdom). Their findings show that dividend premium is a measure of relative growth opportunity of payers and non-payers rather than a measure of investor sentiment for dividend. Another study related to catering theory in common law and civil law countries has been conducted by Ferris, Jayaraman, and Sabherwal (2009). Their study tests for the international presence of dividend catering across a sample of twenty-three countries and find evidence of catering among firms incorporated in common law countries but not for those in civil law countries.

Furthermore, Li and Lie (2006) extend Baker and Wurgler's catering theory by including decreases and increases in existing dividends. Their finding is consistent with the catering theory and also the results provide additional evidence that dividend changes depend on the dividend premium. They find that dividend premium has significant explanatory power of dividend initiations, dividend changes, and changes in the propensity to pay dividends.

On the contrary, several empirical evidences show that firms do not pay dividend as predicted by catering theory. Hoberg and Prabhala (2005) find that catering becomes statistically and economically insignificant when control for risk. Their result show that risk is an important determinant of dividend decisions, but dividend policies cater to investor sentiment is an unimportant factor. Additionally,

Tsuji (2010) tests the catering theory with the firms in Japanese electrical appliances industry and finds that dividend initiation decisions of these firms have no predictive power for the relative future returns of payers over non-payers, the dividend premium is not a determinant of the dividend initiations of the firms, and the dividend premium has no relation with the dividend continuation decisions of the firms.

## **2.2 Literature Related to CEO'S Reputation**

Few works in the finance and economics literature have considered the effects of managerial characteristics on firm investment and financing decisions. Bertrand and Schoar (2003) found that managerial style affects a firm's corporate policy decisions and these differences were also seen in the compensation levels of managers. Richardson, Tuna, and Wysocki (2003) found that firms that share common directors also share the following: governance, financial, disclosure, and strategic policy choices. Chevalier and Ellison (1999) have conducted an investigation on the effect of the age and schooling of the mutual fund manager on the performance of funds. They found that younger managers and managers that had attended good schools earned higher rates of return. Graham and Harvey (2001) in turn have provided survey-based evidence that CFOs with an MBA degree use more sophisticated valuation techniques compared to those that do not have an MBA degree.

In Milbourn's (2003) study, he focused on the CEO's reputation and measured it in terms of the number of press articles that cited the CEO. He found that compensation contracts given to CEOs with a good reputation (i.e., those with more media-counts) exhibited greater pay-for-performance sensitivity. Liu, Zhang and Jiraporn (2011), on the other hand, investigated the relationship between the CEO's reputation and corporate risk-taking; and their empirical results indicated that reputable CEOs tend to take more risks, "especially idiosyncratic and unlevered risk[s]" (Liu, Zhang and Jiraporn, 2011). Investigations on the channels of risk-taking activities have revealed that CEOs with strong reputations tend to seek R&D investments but avoid higher financing risks. Finally, a study on the impact of the CEO's reputation on credit ratings found that firms in which the CEO enjoyed a

strong reputation experienced lower credit ratings. These results suggest that a manager-specific attribute such as reputation can have a significant impact on important corporate outcomes and can influence corporate risk-taking. These results are still robust even after controlling for a large number of firm-specific variables, such as firm size, market-to-book ratio, leverage, R&D spending, capital expenditures, CEO tenure, and year and industry dummies. In terms of economic significance, a one-standard-deviation shock in CEO's reputation increases firm risk by as much as 16.16%; thus the impact of a CEO's reputation can be considered statistically significant as well as economically meaningful. In fact, a good reputation can have a negative outcome; according to March and Shapira (1987), Sitkin and Pablo (1992), Kahneman and Lovallo (1993), and Liu, Zhang and Jiraporn (2011), a strong reputation may create overconfidence, resulting in the CEO's overestimation of his or her problem-solving capability and, as a result, the CEO might exhibit more aggressive risk-taking behavior.

## **CHAPTER 3**

### **HYPOTHESIS**

#### **3.1 The Irrelevance Hypothesis**

This hypothesis assumes that managers are homogeneous and selfless inputs into the production process. It also suggests that different managers can be regarded as perfect substitutes for one another. Many prior studies have subscribed this view and have assumed that top managers do not matter. Although executives may possess different preferences, degrees of risk aversion, or skill levels, none of them translates into actual corporate policies. Furthermore, individual managers may be constrained by organizational structure and external forces so much that their individual characteristics do not influence corporate behavior (Hannan and Freeman, 1977; DiMaggio and Powell, 1983; Liu, Zhang and Jiraporn, 2011). This hypothesis predicts that CEO reputation has no association with the dividend payouts of firms.

#### **3.2 The Investment Hypothesis**

This perspective argues that a CEO that enjoys a strong reputation is vulnerable to make more investment, and a highly reputable CEO tends to be overconfident, take more risks and more investment. The association between CEO reputation and overconfidence is mentioned in the work of Francis et al. (2004), Malmendier and Tate (2005, 2005b), Jin and Kothari (2006) and Hribar and Yang (2007). Francis et al. (2004) suggests that CEO reputation can be a proxy by using the total number of media mentions. Malmendier and Tate (2005, 2005b) classify the CEO as overconfident if he/she is more frequently described as confident and optimistic relative to descriptors such as frugal, conservative, cautious, practical, reliable, or steady. Further, Hribar and Yang (2007) found that the number of media

mentions is positively correlated with other measures of CEO confidence. This finding is consistent with Francis et al. (2004), who used this variable as a proxy for CEO reputation to examine the association between management reputation and a firm's earnings quality. The behavioral decision theory predicts that overconfident CEOs increase the firm's risk-taking (Kahneman and Lovallo, 1993; March and Shapira, 1987; Sitkin and Pablo, 1992). The theory suggests three mechanisms that link CEO overconfidence to the degree of risk-taking: first, overestimation of the CEO's own problem-solving capabilities (Camerer and Lovallo, 1999); second, underestimation of a firm's resource endowments (Shane and Stuart, 2002); and third, underestimation of the uncertainties that the firm is facing (Kahneman and Lovallo, 1993; March and Shapira, 1987). These three mechanisms tend to allow an overconfident CEO to interpret decision situations as less risky than they actually are, and thus to take more risks (Chatterjee and Hambrick, 2007; Sitkin and Pablo, 1992).

Investment and financing decisions are two major corporate policy decisions and therefore they are the main potential channels by which CEOs increase firm risk. If reputable CEOs tend to take greater risks, then greater investment in risky projects should be observed in firms with reputable CEOs. Investment can be financed by internal funds and external funds; however, bondholders often place restrictions on firm leverage ratios in debt covenants in order to protect their interests, so increasing leverage through debt issues may not be an optimal choice for reputable CEOs. Moreover, reputable CEOs that are overconfident tend to believe that the stock of their companies is underpriced, so increasing external funds by issuing equity may also not be an optimal choice for them. As a result, reputable CEOs may prefer to use internal funds to finance the investment in risky projects. Based on these conjectures, this hypothesis predicts a negative relationship between reputable CEOs and dividend payouts.

### **3.3 The Reputation Hypothesis**

This view argues that reputable CEOs exhibit a higher degree of risk aversion. Amihud and Lev (1981), Hirshleifer and Thakor (1992), and Holmstrom and Ricart I Costa (1986) argue that managers avoid taking risks because of career

concerns and possible damage to their image. Career concerns of CEOs have been found to affect CEO behavior (Amihud and Lev, 1981; Hirshleifer and Thakor, 1992; Holmstrom and Ricart I Costa, 1986; and Gilson, 1989, 1990). Reputable CEOs have more to lose than less reputable ones and are expected to be more risk-averse. Gilson (1989, 1990) documents that top managers experience a large personal cost (reputation) when firms default. Warren Buffett once said, “it takes twenty years to build a reputation and five minutes to destroy it.”

A strong reputation is crucial to a CEO’s career for several reasons. First, reputable CEOs are more likely to be invited to join other boards as outside directors (Kaplan and Reishus, 1990; Gilson, 1990; Brickley, Linck and Coles, 1999; Ferris, Jaganathan and Pritchard, 2003). Second, CEOs with a strong reputation are more likely to stay on as chairmen of the board. Furthermore, a strong reputation may create not only board service, but also consulting opportunities, related professional opportunities such as legal or securities arbitrations, status in the community, judgeships, and other opportunities available principally to those with a strong reputation (Brickley, Linck and Coles, 1999). Because the reputable CEOs would have more to lose if their firms perform poorly, they tend to need less fund for making investments and therefore payout more dividends. Based on these arguments, this hypothesis predicts a positive relationship between reputable CEOs and dividend payouts.

## **CHAPTER 4**

### **SAMPLE AND DATA**

This study uses S&P 500 companies over the period 1992-2007, as identified from the ExecuComp database. CEO reputation is measured based on how parties external to the firm view the CEO, as reflected in the number of articles containing the CEO's full name and company affiliation that appeared in major U.S. and global business newspapers and newswires in calendar year  $t$ . In particular, following Milbourn (2003), Francis et al. (2008), and Liu, Zhang and Jiraporn (2011), the search for press releases was conducted in the following major U.S. and international newspapers: the Wall Street Journal, the New York Times, the Washington Post, USA Today, the Financial Times, the Asian Wall Street Journal, Wall Street Journal Europe, and the International Herald Tribune. An article is included once if it contains the CEO's full name and company name, irrespective of how many times the name appears in the article. The total number of article counts in a year was used as a proxy for the CEO's reputation in that year (Milbourn, 2003; Rajgopal et al., 2006; Liu, Zhang and Jiraporn, 2011).

Francis et al. (2008) ensure that the number of citations is not a reflection of CEO infamy as opposed to reputation by conducting three validation checks. First, when the articles are randomly selected, the tone is favorable toward the CEO 95% of the time. Second, the number of press coverage is correlated with a proxy for reputation used by Milbourn (2003) and Rajgopal et al. (2006) who used the numbers of CEOs appointed from outside the firm as a proxy for reputation. Third, the number of citations is highly correlated with explicit recognition of the CEO by the "top CEO" lists compiled by various sources. The results of these validity checks justify the use of press coverage or total citations as a measure of the CEO reputation. Accordingly, similar to their research, this paper also uses the press coverage as a proxy for CEO reputation.

The financial data were obtained from Compustat and stock returns from CRSP. This study excluded financial and utility firms from the sample. The final sample had 4,036 CEO-year observations corresponding to 316 unique firms.

Table 4.1 panel A presents the year distribution of the sample, which was equally represented each year following Liu, Zhang and Jiraporn (2011). The average/median reputation was higher in the 2000s than in the 1990s. This may be due to media coverage improvement. Table 4.1 panel B reports the industry distribution of the sample firms following Whisenant et al. (2003). It shows some cross-industry differences: some industries attract more attention, such as the computer industry.

**Table 4.1** Sample Distribution

The samples consist of the CEOs of all S&P 500 firms as identified from the Execucomp database over the period 1992-2007. Financial and utility firms were excluded. Table 4.1a reports the distribution by year and table 4.1b reports the distribution by industry. The total citation is the number of articles containing the CEO's full name and company affiliation that appeared in major U.S. and global newspapers and newswires in calendar year t.

**Table 4.1 Panel A** Sample Distribution by Year

<b>Year</b>	<b>Number</b>	<b>Percentage</b>	<b>Total Citation</b>	<b>Total</b>	<b>Citation</b>
	<b>of obs.</b>	<b>(%)</b>	<b>(mean)</b>	<b>(median)</b>	
1992	186	4.61	8.89	2.50	
1993	207	5.13	11.59	3.00	
1994	214	5.30	9.90	3.00	
1995	220	5.45	9.05	2.00	
1996	231	5.72	9.06	3.00	
1997	238	5.90	14.30	3.00	
1998	248	6.14	27.17	6.50	
1999	256	6.34	34.69	8.00	
2000	267	6.62	37.85	11.00	
2001	272	6.74	39.39	12.00	
2002	287	7.11	40.83	10.00	
2003	292	7.23	43.01	14.50	

**Table 4.1 Panel A** (Continued)

<b>Year</b>	<b>Number</b>	<b>Percentage</b>	<b>Total Citation</b>	<b>Total</b>	<b>Citation</b>
	<b>of obs.</b>	<b>(%)</b>	<b>(mean)</b>	<b>(median)</b>	
2004	294	7.28	53.62	22.00	
2005	293	7.26	53.46	24.00	
2006	294	7.28	85.75	45.50	
2007	237	5.87	95.86	61.00	
Total/Overall	4,036	100.00	37.34	10.00	
Mean					

**Table 4.1 Panel B** Sample Distribution by Industry

<b>Year</b>	<b>Number</b>	<b>Percentage</b>	<b>Total</b>	<b>Total</b>	<b>Citation</b>
			<b>of obs.</b>	<b>(%)</b>	<b>Citation</b>
					<b>(mean)</b>
Mining, construction	133	3.30	27.42	6.00	
Food	287	7.11	39.06	16.00	
Textiles and printing	337	8.35	29.56	7.00	
Chemicals &	469	11.62	26.79	10.00	
Extractive	288	7.14	25.14	5.50	
Durable manufactures	1,002	24.83	26.47	9.00	
Computers	560	13.88	85.15	21.00	
Transportation	76	1.88	42.71	10.50	
Retail	521	12.91	28.26	7.00	
Services	210	5.20	21.84	3.00	
Other	153	3.79	80.59	15.00	

Table 4.1 panel A shows that there is the variation of citations over time during the period 1992 – 2007. The mean and the median of the number of citations during the year 1900s are much less than those during the year 2000s. This study attempts to solve this year effect by including the year dummy in the tobit and logit regression models in order to control for the variation of citations over the period of study.

Table 4.2 and Table 4.3 report on the statistics of the major variables. The reputation variable (as measured by the total number of media cites) was highly

skewed. This study adopted the method to fix this in the later analysis by taking the logarithm of the number of citations plus unity. Dividend payout in the tobit regression was measured by annual dividend divided by total assets and dividend divided by sales.

Firm policy variables included investment variables (capital expenditure, book leverage, and R&D investment). Finally, the main CEO/firm characteristic variables that were used for the tests included total assets (firm size), CEO tenure, and market-to-book value ratio. A few observations are noteworthy. On average, the CEO has been in office for 7.38 years. The average R&D spending was 3.3% of total assets; however, the capital expenditure was almost twice of R&D spending. The average market-to-book value ratio was about 2.58 times, and the sample firms were on average financially healthy, as suggested by the average ROA of 17.4%.

The sample consisted of CEOs of all S&P 500 firms as identified from the Execucomp database over the period 1992-2007. The total citation was the number of articles containing the CEO's full name and company affiliation that appeared in major U.S. and global newspapers and newswires in calendar year t.

Dividend/Total Assets was calculated by annual dividend divided by the ending total assets in year t. Dividend/Sales was obtained by dividing the annual dividend by annual sales. The Bklev was the ratio of long-term debt plus debt in current liabilities to the book value of assets (TA) in year t.

Total Assets was the book value of assets in year t (TA). Tenure was the number of years that the CEO had served in that capacity, as reported in the Execucomp in year t. The MTB was the ratio of the market value of assets to the book value of assets. Bklev was the ratio of long-term debt plus debt in current liabilities to total assets.

The RD was the research and development expenses (RD) scaled by TA. Missing RD was set to zero. CAPEX was the capital expenditure (CAPEX) scaled by total assets. ROA was the ratio of operating income before depreciation to book assets (OIBDP/TA). All variables were winsorized at the 1% and 99% level.

**Table 4.2** Descriptive Statistics of Firm Characteristics

<b>Variable</b>	<b>Mean</b>	<b>1<sup>st</sup></b>	<b>Median</b>	<b>3<sup>rd</sup></b>	<b>Std.</b>	<b>N</b>
		<b>Quartile</b>		<b>Quartile</b>	<b>Dev.</b>	
Total Citation	38.087	2.000	10.000	35.500	83.903	4,036
<i>Dividend Variables</i>						
Dividend/TA (10 <sup>-3</sup> )	15.544	0.464	10.279	20.781	24.840	4,036
Dividend/Sales (10 <sup>-3</sup> )	17.550	0.448	10.764	22.686	35.709	4,036
<i>Policy Variables</i>						
Bklev	0.221	0.115	0.213	0.313	0.148	4,036
RD	0.033	0.000	0.009	0.050	0.047	4,036
CAPEX	0.060	0.039	0.048	0.078	0.045	4,036
<i>CEO/Firm Char.</i>						
Total Assets	16049.6	2700.5	6086.5	16228.3	41995.7	4,036
Tenure	7.380	2.573	5.088	9.670	6.917	4,036
MTB	2.581	1.486	2.025	3.004	1.714	4,036
ROA	0.174	0.122	0.168	0.218	0.078	4,036

**Table 4.3** Descriptive Statistics of Dividend Payout Dummy Variable

<b>dv_pay</b>	<b>Freq.</b>	<b>mean(totalcite)</b>	<b>sd(totalcite)</b>	<b>mean(dv_ta)</b>	<b>mean(dv_sale)</b>
0	1,022	40.954	106.5036	0	0
1	3,147	31.580	71.10255	0.02059	0.02325

## CHAPTER 5

### METHODOLOGY

This paper tests the hypotheses by running multivariate tobit regression and logistic regression of CEO reputation on firm's dividend, controlling for other factors, as specified in equation (1), (2) and (3). Table 5.1 shows the definition of each variable in the equations.

For equation (1) and (2), tobit regression is employed for regressing dividend/sales and dividend/total assets ratios because these dependent variables are truncated to have a value of more than or equal to zero.

For equation (3), logistic regression is employed for regressing dividend payout dummy because this dependent variable takes value of one if the firm pays dividend and zero if the firm does not pay.

The controlling variables are firm size, market-to-book ratio, leverage ratio, R&D expenditures by total assets, capital expenditures by total assets, CEO tenure, industry dummy variable, and year dummy variable.

$$dv_{ta} = f(totalcrite, size, mtb, bklev, rda, capex, tenure, sic2d, yr) \quad (1)$$

$$dv_{sale} = f(totalcrite, size, mtb, bklev, rda, capex, tenure, sic2d, yr) \quad (2)$$

$$dv_{pay} = f(totalcrite, size, mtb, bklev, rda, capex, tenure, sic2d, yr) \quad (3)$$

**Table 5.1** Definition of Each Variable in Equation 1, 2, and 3.

Variable Name	Definition
Totalcrite	Total number of citations (CEO reputation)
Size	firm size (natural log of total assets)
Mtb	market-to-book ratio
Bklev	book leverage ratio
Rda	R&D expenditures by total assets

**Table 5.1** (Continued)

<b>Variable Name</b>	<b>Definition</b>
Capex	Capital expenditures by total assets
Tenure	The number of years the CEO has been in power
dv_ta	Dividend/total assets
dv_sale	Dividend/sales
dv_pay	dividend payout dummy variable
sic2d	Industry dummies based on the 2-digit SIC code
Yr	Year dummies

## 5.1 Tobit Regression

When the dependent variables are restricted to have values in a specified range i.e., truncated or censored, the linear regression analysis is not appropriate for modeling.

Truncation is when the sample is drawn from a subset of the population so that only certain values are included in the sample. Censoring is when a response variable is set to an arbitrary value when the variable is beyond the censoring point.

In the truncated case, neither the dependent nor the explanatory variables can be observed for individual whose dependent variable lies in the truncation region. In contrasts, when the data are censored the value of the dependent variable for individuals that is beyond the censoring point is not observable, but the values of the explanatory variables is observable. (Brooks 2008)

Censored dependent variables have a restricted range, such as the dividend to total assets ratio, which runs from 0 to the highest level recorded. The technique appropriate for truncated and censored dependent variables is the tobit regression analysis, named after Tobin (1958). To illustrate, suppose that we want to model the dividend to total assets ( $y_{it}^*$ ) as a function of total citations ( $x_{1i}$ ), book leverage ( $x_{2i}$ ), and firm size ( $x_{3i}$ ). The model would be expressed as in equation (1).

$$y_i^* = b_0 + b_1x_{1i} + b_2x_{2i} + b_3x_{3i} + e_i \quad (1)$$

$$y_i = y_i^* \text{ for } y_i^* \geq 0$$

$$y_i = 0 \text{ for } y_i^* < 0$$

$y_i^*$  represents the true dividend to total assets and this will be observable only for dividend to total assets more than or equal to zero.

In this study, tobit regression analysis is employed for the models whose dependent variables are dividend to total assets and dividend to sales because these two variables are left censored at zero.

## 5.2 Logistic Regression

Logistic regression analysis is a nonlinear regression model widely used when the response variable is qualitative. For example, if we want to predict whether the firm is going to payout dividend or not. In this use of logistic regression model, the response variable is qualitative and will be represented by a 0, 1 indicator variable. (Kutner, Nachtsheim, Neter, and Li 2005)

The parameters of the Logistic response function are estimated by using the method of maximum likelihood because this method is well suited to deal with the problems associated with the responses variable being binary. The logistic regression assumes that the logit transformation of the outcome variable has a linear relationship with the predictor variables. The logistic regression model in the usual form is expressed in equation (2).

$$y_i = E[y_i] + e_i \quad (2)$$

$y_i$  are independent Bernoulli random variables with expected values in equation (3).

$$E[y_i] = \exp(b_0 + b_1x_{1i} + b_2x_{2i} + b_3x_{3i}) / (1 + \exp(b_0 + b_1x_{1i} + b_2x_{2i} + b_3x_{3i})) \quad (3)$$

Since each  $y_i$  observation is an ordinary Bernoulli random variable, where:

$$P(y_i = 1) = \prod_i$$

$$P(y_i = 0) = 1 - \prod_i$$

The maximum likelihood estimates of coefficients in the logistic regression model will be those values of coefficients that maximize the log-likelihood function.

The logistic estimation can be transform into the log of odds ratio which is expressed as in equation (4).

$$\text{Log} (\prod_i / 1 - \prod_i) = b_0 + b_1 x_{1i} \quad (4)$$

The left hand of the equation (4) above is known as the odds ratio which expresses the probability in terms of the odds of  $y = 1$ .

The interpretation of the estimated regression coefficient ( $b_1$ ) in the logistic response function is, assuming all other variables are held constant, for any unit increase in  $x_1$ , the estimated ratio of the odds is  $\exp(b_1)$ . (Baum 2006)

For example, if the  $b_1$  is 1.2, then it means for any unit increase in  $x_1$ , the log of odds will be 1.2, the odds ratio will be equal to  $\exp(1.2)$  which is 3.32. and the probability that the observation will fall into a specified category can be computed from  $p/(1 - p) = 3.32$  so the probability will be equal to 0.7685.

In this study, suppose that we want to model the propensity of the firm to payout dividend ( $y_{1i}^*$ ) as a function of total citations ( $x_{1i}$ ), book leverage ( $x_{2i}$ ), and firm size ( $x_{3i}$ ). The model would be expressed as in equation (2) and equation (3) where the propensity to payout ( $y_{1i}^*$ ) is a function of total citations ( $x_{1i}$ ), book leverage ( $x_{2i}$ ), and firm size ( $x_{3i}$ ).

If the estimated logit regression coefficient of total citations equal to -0.5, then it can be interpreted as, assuming all other variables are held constant, for any unit increase in total citations, the estimated ratio of the odds of paying out dividend for firm is equal to  $\exp(-0.5)$  which is 0.6065. And this odds can be transformed to the expected probability (or propensity) that the firm will pay dividend equal to 0.3775.

## CHAPTER 6

### RESULTS

The first section of the results shows the two independent-sample t-tests in order to explore whether the average number of times that CEOs were cited between firms that did not pay dividends and firms that did pay dividends. The overall results suggest that on average, the CEOs of the firms that did not pay dividends were cited more.

The following section of the results show the regressions of running different dividend measurements on CEO reputation (proxy by the number of times the CEO was cited) and other controlling factors. The regressions include tobit regressions, logit regressions, and linear regressions with robust clustered standard errors. The results show that there is significant negative association between CEO reputation and dividend payouts.

The last section of the results show the regressions of running dividend measurements on CEO reputation (proxy by the log of the total citations plus unity) and other controlling factors. The results are consistent with the regressions that use total citations and the proxy for CEO reputation.

**Table 6.1** Analysis of Variance

Summary of Reputation			
<b>dv_pay</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Freq.</b>
0	40.954012	106.5036	1022
1	31.579917	71.102548	3147
Total	33.877908	81.306868	4169

**Table 6.1** (Continued)

## Analysis of Variance

<b>Source</b>	<b>SS</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>Prob &gt; F</b>
Between groups	67791.366	1	67791.366	10.28	0.0014
Within groups	27486051.5	4167	6596.12467		
Total	27553842.9	4168	6610.80683		

**Note:** Bartlett's test for equal variances:

chi2(1) = 283.2040 Prob>chi2 = 0.000

Table 6.1 shows the analysis of variance (of the number of times that the CEO was cited) between the two groups, the first group consisting of the firms that paid dividends and the other group consisting of the firms that did not pay dividends. Bartlett's test for equal variances indicated that the variance in the number of times that the CEO was cited between the two groups were significant different at the 5% level.

**Table 6.2** Two-Sample T-Test with Unequal Variances

<b>Group</b>	<b>Obs</b>	<b>Mean</b>	<b>Std. Err.</b>	<b>Std. Dev.</b>	<b>[95% Conf. Interval]</b>
0	1022	40.95401	3.331493	106.5036	34.41666 47.49137
1	3147	31.57992	1.267467	71.10255	29.09477 34.06506
combined	4169	33.87791	1.259248	81.30687	31.40911 36.34671
diff		9.374094	3.564452		2.381531 16.36666

**Note:** diff = mean(0) - mean(1) t = 2.6299

Ho: diff = 0 Welch's degrees of freedom = 1329.51

Ha: diff < 0 Ha: diff != 0 Ha: diff > 0

Pr(T < t) = 0.9957 Pr(|T| > |t|) = 0.0086 Pr(T > t) = 0.0043

Table 6.2 shows the two-sample t-tests of the mean equality between group 0 (firms that did not pay dividends) and group 1 (firms that paid dividends). The average number of times that the CEOs of firms that did not pay dividends were cited was approximately 41 times, whereas the average number of times that the CEOs of the firms that did pay dividends were cited was approximately 32 times. The Welch's statistic shows that, on average, the CEOs of firms that did not pay out dividends were cited more than the CEOs of firms that paid dividends. These results imply that the regressions of dividend payout variables on the number of times that the CEO was cited should report a negative association.

**Table 6.3** Tobit Regression of Dividend to Total Assets on CEO's Reputation

<b>dv_ta</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>t</b>	<b>P&gt; t </b>	<b>[95% Conf. Interval]</b>	
totalcite	-.0000219	5.14e-06	-4.25	0.000	-.0000319	-.0000118
size	.0034804	.0003531	9.86	0.000	.0027882	.0041726
mtb	.0034509	.000268	12.88	0.000	.0029255	.0039762
bklev	-.0017472	.0030912	-0.57	0.572	-.0078078	.0043134
rda	-.1258673	.0119522	-10.53	0.000	-.1493008	-.1024338
Capex	-.0152288	.0108835	-1.40	0.162	-.036567	.0061094
tenure	-.0002196	.0000551	-3.98	0.000	-.0003277	-.0001115
_Isic2d_12	-.0158748	.0066206	-2.40	0.017	-.0288552	-.0028944
_Isic2d_13	-.0171588	.0044191	-3.88	0.000	-.0258228	-.0084948
_Isic2d_14	.0050378	.0067557	0.75	0.456	-.0082075	.018283
_Isic2d_15	-.018629	.0051142	-3.64	0.000	-.0286559	-.008602
_Isic2d_16	-.0258141	.0059841	-4.31	0.000	-.0375465	-.0140816
_Isic2d_20	.0041511	.0043369	0.96	0.339	-.0043519	.012654
_Isic2d_21	.0861889	.0056447	15.27	0.000	.0751219	.0972559
_Isic2d_23	-.0115355	.0049631	-2.32	0.020	-.0212661	-.001805
_Isic2d_24	.0029201	.0053275	0.55	0.584	-.007525	.0133653
_Isic2d_25	-.0050908	.0056107	-0.91	0.364	-.0160912	.0059095

**Table 6.3** (Continued)

<b>dv_ta</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>t</b>	<b>P&gt; t </b>	<b>[95% Conf. Interval]</b>	
_Isic2d_26	.0018453	.0046595	0.40	0.692	-.00729	.0109806
_Isic2d_27	-.0058084	.0046767	-1.24	0.214	-.0149775	.0033608
_Isic2d_28	.0025492	.0042996	0.59	0.553	-.0058805	.0109788
_Isic2d_29	-.0080296	.0046944	-1.71	0.087	-.0172333	.0011741
_Isic2d_30	-.012569	.0052561	-2.39	0.017	-.022874	-.002264
_Isic2d_31	-.1688303	.	.	.	.	.
_Isic2d_33	-.0125462	.0046983	-2.67	0.008	-.0217576	-.0033348
_Isic2d_34	-.0032633	.0047779	-0.68	0.495	-.0126308	.0061042
_Isic2d_35	-.0170489	.0043433	-3.93	0.000	-.0255643	-.0085335
_Isic2d_36	-.0157331	.0044137	-3.56	0.000	-.0243866	-.0070797
_Isic2d_37	-.0070109	.0044927	-1.56	0.119	-.0158193	.0017974
_Isic2d_38	-.0118562	.004392	-2.70	0.007	-.0204671	-.0032452
_Isic2d_39	-.0039992	.0056266	-0.71	0.477	-.0150307	.0070322
_Isic2d_40	-.019268	.0049488	-3.89	0.000	-.0289705	-.0095654
_Isic2d_42	-.0034337	.0084571	-0.41	0.685	-.0200146	.0131473
_Isic2d_44	-.0055988	.0068151	-0.82	0.411	-.0189604	.0077629
_Isic2d_45	-.0254218	.0061219	-4.15	0.000	-.0374243	-.0134192
_Isic2d_47	.0016345	.0060131	0.27	0.786	-.0101547	.0134238
_Isic2d_48	-.0166787	.0047001	-3.55	0.000	-.0258937	-.0074637
_Isic2d_50	.0074488	.00565	1.32	0.187	-.0036286	.0185262
_Isic2d_51	-.0139525	.0053288	-2.62	0.009	-.0244001	-.003505
_Isic2d_52	-.0165013	.0051613	-3.20	0.001	-.0266205	-.006382
_Isic2d_53	-.0221596	.0047837	-4.63	0.000	-.0315384	-.0127807
_Isic2d_54	-.0286757	.0051749	-5.54	0.000	-.0388216	-.0185297

**Table 6.3** (Continued)

<b>dv_ta</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>t</b>	<b>P&gt; t </b>	<b>[95% Conf. Interval]</b>	
_Isic2d_55	-.1614213	.	.	.	.	.
_Isic2d_56	-.0084064	.0049209	-1.71	0.088	-.0180543	.0012416
_Isic2d_57	-.0246195	.0056831	-4.33	0.000	-.0357617	-.0134773
_Isic2d_58	-.0160475	.005294	-3.03	0.002	-.0264268	-.0056682
_Isic2d_59	-.0229054	.0047622	-4.81	0.000	-.032242	-.0135687
_Isic2d_70	-.0128603	.0084168	-1.53	0.127	-.0293621	.0036416
_Isic2d_72	.0110509	.0069204	1.60	0.110	-.0025171	.0246189
_Isic2d_73	-.0236523	.0044014	-5.37	0.000	-.0322817	-.015023
_Isic2d_75	-.0137089	.0068748	-1.99	0.046	-.0271875	-.0002303
_Isic2d_78	-.044292	.0081574	-5.43	0.000	-.0602853	-.0282987
_Isic2d_79	-.0125157	.0072625	-1.72	0.085	-.0267546	.0017232
_Isic2d_80	-.0364806	.0055134	-6.62	0.000	-.0472902	-.0256709
_Isic2d_82	(omitted)					
_Isic2d_87	-.0179555	.0071767	-2.50	0.012	-.0320261	-.003885
_Isic2d_99	-.0215751	.0057113	-3.78	0.000	-.0327727	-.0103776
_IYEAR_1993	.0022238	.0021367	1.04	0.298	-.0019655	.0064131
_IYEAR_1994	.0004009	.0021228	0.19	0.850	-.003761	.0045628
_IYEAR_1995	-.001258	.0021146	-0.59	0.552	-.0054038	.0028878
_IYEAR_1996	-.0022961	.002111	-1.09	0.277	-.0064348	.0018427
_IYEAR_1997	-.002472	.0021041	-1.17	0.240	-.0065974	.0016534
_IYEAR_1998	-.0048921	.0020973	-2.33	0.020	-.009004	-.0007803
_IYEAR_1999	-.0064644	.0021005	-3.08	0.002	-.0105826	-.0023462
_IYEAR_2000	-.0067065	.0020853	-3.22	0.001	-.0107948	-.0026181
_IYEAR_2001	-.0060129	.0020758	-2.90	0.004	-.0100827	-.0019432

**Table 6.3** (Continued)

<b>dv_ta</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>t</b>	<b>P&gt; t </b>	<b>[95% Conf. Interval]</b>	
_IYEAR_2002	-.0072114	.0020678	-3.49	0.000	-.0112655	-.0031573
_IYEAR_2003	-.0072783	.002066	-3.52	0.000	-.0113288	-.0032277
_IYEAR_2004	-.0061334	.0020539	-2.99	0.003	-.0101602	-.0021066
_IYEAR_2005	-.0038004	.0020488	-1.85	0.064	-.0078172	.0002164
_IYEAR_2006	.0002162	.0020875	0.10	0.918	-.0038764	.0043089
_cons	-.0051764	.0054668	-0.95	0.344	-.0158946	.0055418
/sigma	.0207618	.0002798			.0202131	.0213104

**Note:** 1. . xi: tobit dv\_ta totalcite size mtb bklev rda Capex

tenure i.sic2d i.YEAR, ll(0)

i.sic2d \_Isic2d\_10-99 (naturally coded; \_Isic2d\_10 omitted)

i.YEAR \_IYEAR\_1992-2006 (naturally coded; \_IYEAR\_1992 omitted)

2. \_Isic2d\_82 omitted because of collinearity

Tobit regression	Number of obs	=	3834
	LR chi2(67)	=	1839.75
	Prob > chi2	=	0.0000
Log likelihood = 6594.2896	Pseudo R2	=	-0.1621

3. Obs. summary: 900 left-censored observations at dv\_ta<=0

2934 uncensored observations

0 right-censored observations

Table 6.3 shows the results of the tobit regression that regresses the dividend to total assets ratio on the CEO's reputation and other controlling factors. The dividend to total assets ratio variable is left censored at zero. The controlling factors include firm size, market-to-book value ratio, book leverage ratio, R&D, capital

expenditures, CEO tenure, and also the industry SIC code and year dummies. At 5% level of significant, the tobit estimates of dividend to total assets ratio show negative, significant effects regarding the CEO's reputation. The results imply that the increase in CEO's reputation is associated with the decrease in probability that the firm will pay more dividends in relation to the percentage of its total assets. At 5% level of significant, the tobit estimates also reveal negative significant effects regarding the R&D expenditures. These results support the investment hypothesis, which predicts that reputable CEOs tend to use funds to invest more rather than paying out dividends.

For the controlling variables, the results show that firm size and market-to-book value ratio have a significant positive association with the dividend to total assets ratio (at the 5% significance level). However, firm R&D expenditures and CEO tenure exhibited a significant negative association with dividend to total assets ratio (at the 5% significance level). The firm book leverage and capital expenditures had an insignificant association with dividend to total assets ratio.

The significant negative association between firm R&D and dividend to total assets ratio shows that the firm that invests more in R&D tends to pay lower dividends. It also supports the investment hypothesis whereby reputable CEOs pay fewer dividends because they use the available internal funds to make more R&D expenditures, which implies that reputable CEOs tend to be more confident that their investments will turn out to be successful.

**Table 6.4** Tobit Regression of Dividend to Sales on CEO's Reputation

<b>dv_sale</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>t</b>	<b>P&gt; t </b>	<b>[95% Conf. Interval]</b>	
totalcite	-.0000249	6.16e-06	-4.04	0.000	-.000037	-.0000128
size	.0053657	.000426	12.59	0.000	.0045304	.0062009
mtb	.0028986	.0003243	8.94	0.000	.0022627	.0035345
bklev	.0039091	.0037278	1.05	0.294	-.0033997	.0112179
rda	-.1127057	.0143254	-7.87	0.000	-.1407921	-.0846194
Capex	-.0404388	.0130977	-3.09	0.002	-.066118	-.0147596
tenure	-.0002822	.0000663	-4.25	0.000	-.0004123	-.0001521
_Isic2d_12	-.0324872	.0079543	-4.08	0.000	-.0480824	-.0168921
_Isic2d_13	-.0277168	.0053054	-5.22	0.000	-.0381185	-.0173151

**Table 6.4** (Continued)

<b>dv_sale</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>t</b>	<b>P&gt; t </b>	<b>[95% Conf. Interval]</b>
_Isic2d_14	-.0109382	.0081167	-1.35	0.178	-.0268518 .0049754
_Isic2d_15	-.0413855	.0061447	-6.74	0.000	-.0534328 -.0293382
_Isic2d_16	-.0508007	.0072773	-6.98	0.000	-.0650686 -.0365329
_Isic2d_20	-.0207112	.0052112	-3.97	0.000	-.0309283 -.010494
_Isic2d_21	.047997	.0067824	7.08	0.000	.0346995 .0612945
_Isic2d_23	-.0336699	.0059696	-5.64	0.000	-.0453739 -.0219659
_Isic2d_24	.0266524	.0064009	4.16	0.000	.0141029 .0392019
_Isic2d_25	-.0300028	.006741	-4.45	0.000	-.0432192 -.0167865
_Isic2d_26	-.0213485	.0055983	-3.81	0.000	-.0323245 -.0103725
_Isic2d_27	-.0224167	.005619	-3.99	0.000	-.0334332 -.0114002
_Isic2d_28	-.0142699	.005166	-2.76	0.006	-.0243983 -.0041416
_Isic2d_29	-.0316289	.0056404	-5.61	0.000	-.0426874 -.0205704
_Isic2d_30	-.0373739	.0063236	-5.91	0.000	-.0497718 -.024976
_Isic2d_31	-.2077203	.	.	.	.
_Isic2d_33	-.0328442	.0056453	-5.82	0.000	-.0439122 -.0217761
_Isic2d_34	-.0243972	.0057404	-4.25	0.000	-.0356518 -.0131426
_Isic2d_35	-.0378907	.0052192	-7.26	0.000	-.0481234 -.0276581
_Isic2d_36	-.0341316	.0053027	-6.44	0.000	-.0445279 -.0237352
_Isic2d_37	-.0307627	.0053982	-5.70	0.000	-.0413464 -.0201789
_Isic2d_38	-.0321472	.0052778	-6.09	0.000	-.0424948 -.0217997
_Isic2d_39	-.0258304	.0067599	-3.82	0.000	-.0390837 -.0125771
_Isic2d_40	-.0300671	.0059461	-5.06	0.000	-.0417249 -.0184093
_Isic2d_42	-.0319764	.0101608	-3.15	0.002	-.0518976 -.0120552
_Isic2d_44	.0001434	.0081881	0.02	0.986	-.0159102 .016197
_Isic2d_45	-.0446835	.0073517	-6.08	0.000	-.0590972 -.0302698
_Isic2d_47	-.0313038	.0072259	-4.33	0.000	-.0454709 -.0171367
_Isic2d_48	-.0298438	.0056423	-5.29	0.000	-.0409061 -.0187815
_Isic2d_50	-.0274034	.0067887	-4.04	0.000	-.0407133 -.0140935
_Isic2d_51	-.043695	.0064024	-6.82	0.000	-.0562475 -.0311425
_Isic2d_52	-.0400527	.0062011	-6.46	0.000	-.0522105 -.0278948
_Isic2d_53	-.0477605	.0057659	-8.28	0.000	-.059065 -.036456
_Isic2d_54	-.0577298	.0063063	-9.15	0.000	-.0700939 -.0453657
_Isic2d_55	-.2028629	.	.	.	.
_Isic2d_56	-.0338689	.0059218	-5.72	0.000	-.0454792 -.0222586
_Isic2d_57	-.0486061	.0069094	-7.03	0.000	-.0621526 -.0350596
_Isic2d_58	-.0348771	.0063594	-5.48	0.000	-.0473454 -.0224089
_Isic2d_70	-.0218396	.0101123	-2.16	0.031	-.0416657 -.0020136
_Isic2d_72	-.0043311	.0083144	-0.52	0.602	-.0206324 .0119701

**Table 6.4** (Continued)

<b>dv_sale</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>t</b>	<b>P&gt; t </b>	<b>[95% Conf. Interval]</b>	
_Isic2d_73	-.0436514	.0052891	-8.25	0.000	-.0540212	-.0332816
_Isic2d_75	-.0312031	.00826	-3.78	0.000	-.0473977	-.0150086
_Isic2d_78	-.0658431	.0098531	-6.68	0.000	-.0851611	-.0465251
_Isic2d_79	-.024742	.0086817	-2.85	0.004	-.0417633	-.0077208
_Isic2d_80	-.0609078	.00665	-9.16	0.000	-.0739457	-.0478699
_Isic2d_82	(omitted)					
_Isic2d_87	-.0227179	.0086126	-2.64	0.008	-.0396037	-.0058321
_Isic2d_99	-.0318815	.0068635	-4.65	0.000	-.045338	-.018425
_IYEAR_1993	.0030735	.0025781	1.19	0.233	-.0019812	.0081281
_IYEAR_1994	.0016794	.0025596	0.66	0.512	-.003339	.0066977
_IYEAR_1995	-.0002577	.0025508	-0.10	0.920	-.0052587	.0047434
_IYEAR_1996	-.0020663	.0025478	-0.81	0.417	-.0070614	.0029288
_IYEAR_1997	-.0027844	.0025402	-1.10	0.273	-.0077648	.0021959
_IYEAR_1998	-.0036399	.0025283	-1.44	0.150	-.0085969	.0013171
_IYEAR_1999	-.0050049	.0025325	-1.98	0.048	-.00997	-.0000398
_IYEAR_2000	-.0041123	.0025117	-1.64	0.102	-.0090366	.0008121
_IYEAR_2001	-.003727	.0024993	-1.49	0.136	-.0086272	.0011731
_IYEAR_2002	-.0050054	.0024883	-2.01	0.044	-.009884	-.0001267
_IYEAR_2003	-.0054275	.0024878	-2.18	0.029	-.0103049	-.00055
_IYEAR_2004	-.003568	.0024723	-1.44	0.149	-.0084152	.0012792
_IYEAR_2005	-.0014071	.002467	-0.57	0.568	-.006244	.0034297
_IYEAR_2006	.0013704	.0025147	0.54	0.586	-.0035599	.0063007
_cons	-.0010949	.0065828	-0.17	0.868	-.0140011	.0118114
/sigma	.0249435	.000335			.0242867	.0256003

**Note:**

1. . . xi: tobit dv\_sale totalcite size mtb bklev rda Capex tenure i.sic2d i.YEAR  
i.sic2d \_Isic2d\_10-99 (naturally coded; \_Isic2d\_10 omitted)  
i.YEAR \_IYEAR\_1992-2006 (naturally coded; \_IYEAR\_1992 omitted)
2. \_Isic2d\_82 omitted because of collinearity

Tobit regression	Number of obs	=	3834
	LR chi2(67)	=	1600.58
	Prob > chi2	=	0.0000
Log likelihood = 6079.7744	Pseudo R2	=	-0.1516

3. Obs. summary: 900 left-censored observations at dv\_sale<=0  
2934 uncensored observations  
0 right-censored observations

Table 6.4 shows the results of the tobit regression, which regress the dividend to sales ratio on the CEO's reputation and other controlling factors. The dividend to sales ratio variable is left censored at zero. Similar to the previous regression (the regression of dividend to total assets ratio and the CEO's reputation in Table 6.3), this tobit estimate of dividend to sales ratio shows negative, significant effects regarding the CEO's reputation. The results imply that the CEO's reputation decreases the probability that the firm will pay more dividends in relation to the percentage of its sales. These results also support the investment hypothesis, which predicts that reputable CEOs tend funds to make more investments rather than to payout dividends.

For the controlling variables, the results show that firm size and the market-to-book value ratio have a significant positive association with the dividend to sales ratio (at the 5% significance level). However, firm R&D expenditures, capital expenditures, and CEO tenure exhibited a significant negative association with the dividend to sales ratio (at the 5% significance level). The firm book leverage was the only factor that had an insignificant association with the dividend to sales ratio.

**Table 6.5** Logit Regression of Dividend Payout Dummy on CEO's Reputation

<b>dv_pay</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>	<b>[95% Conf. Interval]</b>	
totalcite	-.0033035	.0005869	-5.63	0.000	-.0044538	-.0021531
size	.8336778	.0528924	15.76	0.000	.7300106	.9373449
mtb	.0414442	.0302528	1.37	0.171	-.0178502	.1007386
bklev	.4466331	.3974434	1.12	0.261	-.3323417	1.225608
rda	-14.14958	1.378958	-10.26	0.000	-16.85229	-11.44687
Capex	1.748432	1.411647	1.24	0.216	-1.018345	4.515209
tenure	-.0380561	.0070427	-5.40	0.000	-.0518596	-.0242526
_Isic2d_12	(omitted)					
_Isic2d_13	-14.37939	575.7502	-0.02	0.980	-1142.829	1114.07
_Isic2d_14	(omitted)					
_Isic2d_15	(omitted)					
_Isic2d_16	-15.32666	575.7504	-0.03	0.979	-1143.777	1113.123
_Isic2d_20	-12.75304	575.7503	-0.02	0.982	-1141.203	1115.697
_Isic2d_21	(omitted)					
_Isic2d_23	-13.21088	575.7503	-0.02	0.982	-1141.661	1115.239
_Isic2d_24	(omitted)					

**Table 6.5** (Continued)

<b>dv_pay</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>	<b>[95% Conf. Interval]</b>	
_Isic2d_25	(omitted)					
_Isic2d_26	-12.03153	575.7507	-0.02	0.983	-1140.482	1116.419
_Isic2d_27	(omitted)					
_Isic2d_28	-13.81758	575.7502	-0.02	0.981	-1142.267	1114.632
_Isic2d_29	(omitted)					
_Isic2d_30	-14.60922	575.7503	-0.03	0.980	-1143.059	1113.841
_Isic2d_31	(omitted)					
_Isic2d_33	-12.48586	575.7505	-0.02	0.983	-1140.936	1115.964
_Isic2d_34	(omitted)					
_Isic2d_35	-14.44058	575.7502	-0.03	0.980	-1142.89	1114.009
_Isic2d_36	-14.25917	575.7502	-0.02	0.980	-1142.709	1114.191
_Isic2d_37	-10.80986	575.7511	-0.02	0.985	-1139.261	1117.642
_Isic2d_38	-13.94162	575.7502	-0.02	0.981	-1142.391	1114.508
_Isic2d_39	(omitted)					
_Isic2d_40	(omitted)					
_Isic2d_42	(omitted)					
_Isic2d_44	(omitted)					
_Isic2d_45	-14.82393	575.7505	-0.03	0.979	-1143.274	1113.626
_Isic2d_47	(omitted)					
_Isic2d_48	-14.47427	575.7503	-0.03	0.980	-1142.924	1113.976
_Isic2d_50	(omitted)					
_Isic2d_51	(omitted)					
_Isic2d_52	(omitted)					
_Isic2d_53	-15.10152	575.7503	-0.03	0.979	-1143.551	1113.348
_Isic2d_54	-16.79729	575.7503	-0.03	0.977	-1145.247	1111.653
_Isic2d_55	(omitted)					
_Isic2d_56	-13.02499	575.7504	-0.02	0.982	-1141.475	1115.425
_Isic2d_57	-14.80009	575.7503	-0.03	0.979	-1143.25	1113.65
_Isic2d_58	-14.58596	575.7504	-0.03	0.980	-1143.036	1113.864
_Isic2d_59	-15.37663	575.7503	-0.03	0.979	-1143.826	1113.073
_Isic2d_70	(omitted)					
_Isic2d_72	(omitted)					
_Isic2d_73	-14.56273	575.7502	-0.03	0.980	-1143.012	1113.887
_Isic2d_75	(omitted)					
_Isic2d_78	-17.19382	575.7506	-0.03	0.976	-1145.644	1111.257
_Isic2d_79	-13.8525	575.7506	-0.02	0.981	-1142.303	1114.598
_Isic2d_80	-16.63358	575.7503	-0.03	0.977	-1145.083	1111.816
_Isic2d_82	(omitted)					
_Isic2d_87	-12.67568	575.7512	-0.02	0.982	-1141.127	1115.776

**Table 6.5** (Continued)

<b>dv_pay</b>		<b>Coef.</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>	<b>[95% Conf. Interval]</b>
	_Isic2d_99	(omitted)				
	_IYEAR_1993	-.1442919	.3553801	-0.41	0.685	-.8408241 .5522404
	_IYEAR_1994	-.2398986	.3521329	-0.68	0.496	-.9300665 .4502693
	_IYEAR_1995	-.7413839	.3400535	-2.18	0.029	-1.407877 -.0748912
	_IYEAR_1996	-1.162781	.332734	-3.49	0.000	-1.814928 -.5106346
	_IYEAR_1997	-1.104825	.3349361	-3.30	0.001	-1.761288 -.4483628
	_IYEAR_1998	-1.248555	.3320329	-3.76	0.000	-1.899328 -.5977827
	_IYEAR_1999	-1.508367	.3311245	-4.56	0.000	-2.157359 -.859375
	_IYEAR_2000	-1.767524	.3262968	-5.42	0.000	-2.407054 -1.127994
	_IYEAR_2001	-1.856234	.3247431	-5.72	0.000	-2.492718 -1.219749
	_IYEAR_2002	-1.992058	.3229012	-6.17	0.000	-2.624933 -1.359184
	_IYEAR_2003	-1.963319	.3239114	-6.06	0.000	-2.598174 -1.328465
	_IYEAR_2004	-1.776528	.3249734	-5.47	0.000	-2.413464 -1.139591
	_IYEAR_2005	-1.6846	.3260669	-5.17	0.000	-2.323679 -1.04552
	_IYEAR_2006	-1.589764	.331184	-4.80	0.000	-2.238873 -.9406554
	_cons	10.18724	575.7504	0.02	0.986	-1118.263 1138.637

- Note:**
1. . xtset gvkey1  
   . xi: logit dv\_pay totalcite size mtb bklev rda Capex tenure i.sic2d  
   i.YEAR panel variable: gvkey1 (unbalanced)  
   i.sic2d \_Isic2d\_10-99         (naturally coded; \_Isic2d\_10 omitted)  
   i.YEAR \_IYEAR\_1992-2006     (naturally coded; \_IYEAR\_1992 omitted)
  2. \_Isic2d\_12 != 0 predicts success perfectly  
   \_Isic2d\_12 dropped and 16 obs not used
  3. \_Isic2d\_14 != 0 predicts success perfectly  
   \_Isic2d\_14 dropped and 15 obs not used
  4. \_Isic2d\_15 != 0 predicts success perfectly  
   \_Isic2d\_15 dropped and 50 obs not used
  5. \_Isic2d\_21 != 0 predicts success perfectly  
   \_Isic2d\_21 dropped and 30 obs not used
  6. \_Isic2d\_24 != 0 predicts success perfectly  
   \_Isic2d\_24 dropped and 38 obs not used

- Note:** 7. `_Isic2d_25 != 0` predicts success perfectly  
`_Isic2d_25` dropped and 30 obs not used
8. `_Isic2d_27 != 0` predicts success perfectly  
`_Isic2d_27` dropped and 89 obs not used
9. `_Isic2d_29 != 0` predicts success perfectly  
`_Isic2d_29` dropped and 88 obs not used
10. `_Isic2d_31 != 0` predicts failure perfectly  
`_Isic2d_31` dropped and 6 obs not used
11. `_Isic2d_34 != 0` predicts success perfectly  
`_Isic2d_34` dropped and 74 obs not used
12. `_Isic2d_39 != 0` predicts success perfectly  
`_Isic2d_39` dropped and 30 obs not used
13. `_Isic2d_40 != 0` predicts success perfectly  
`_Isic2d_40` dropped and 58 obs not used
14. `_Isic2d_42 != 0` predicts success perfectly  
`_Isic2d_42` dropped and 8 obs not used
15. `_Isic2d_44 != 0` predicts success perfectly  
`_Isic2d_44` dropped and 15 obs not used
16. `_Isic2d_47 != 0` predicts success perfectly  
`_Isic2d_47` dropped and 24 obs not used
17. `_Isic2d_50 != 0` predicts success perfectly  
`_Isic2d_50` dropped and 30 obs not used
18. `_Isic2d_51 != 0` predicts success perfectly  
`_Isic2d_51` dropped and 39 obs not used
19. `_Isic2d_52 != 0` predicts success perfectly  
`_Isic2d_52` dropped and 45 obs not used
20. `_Isic2d_55 != 0` predicts failure perfectly  
`_Isic2d_55` dropped and 27 obs not used

**Note:** 21. `_Isic2d_70 != 0` predicts success perfectly  
`_Isic2d_70` dropped and 8 obs not used

22. `_Isic2d_72 != 0` predicts success perfectly  
`_Isic2d_72` dropped and 14 obs not used

23. `_Isic2d_75 != 0` predicts success perfectly  
`_Isic2d_75` dropped and 15 obs not used

24. `_Isic2d_99 != 0` predicts success perfectly  
`_Isic2d_99` dropped and 30 obs not used

25. `_Isic2d_82` omitted because of collinearity  
Iteration 0: log likelihood = -1822.3192  
Iteration 1: log likelihood = -1305.1834  
Iteration 2: log likelihood = -1257.6558  
Iteration 3: log likelihood = -1254.6188  
Iteration 4: log likelihood = -1254.346  
Iteration 5: log likelihood = -1254.3112  
Iteration 6: log likelihood = -1254.3051  
Iteration 7: log likelihood = -1254.3037  
Iteration 8: log likelihood = -1254.3033  
Iteration 9: log likelihood = -1254.3033  
Iteration 10: log likelihood = -1254.3033

Logistic regression	Number of obs	=	3055
	LR chi2(46)	=	1136.03
	Prob > chi2	=	0.0000
Log likelihood = -1254.3033	Pseudo R2	=	0.3117

Table 6.5 shows the results of the logit regression, which regresses the dividend payout dummy upon the CEO's reputation and other controlling factors. The dividend payout dummy is a Boolean response variable. All the observations on the dividend payout dummy were either 0 (firm did not pay dividends) or 1 (firm did pay dividends). Other controlling factors included firm size, market-to-book value ratio, book leverage ratio, R&D, capital expenditures, CEO tenure, and also the industry SIC code and year dummies. Similar to the first two tobit models, the logit estimates of the dividend dummy showed negative, significant effects regarding the CEO's reputation. The results imply that the CEO's reputation decreases the likelihood that

the firm will pay dividends. These results also support the investment hypothesis, which predicts that reputable CEOs tend to use funds to make more investments rather than to payout dividends.

For the controlling variables, the results show that firm size is the only variable that has a significant positive association with the likelihood that the firm will payout dividends (at the 5% significance level). However, firm R&D expenditures and CEO tenure showed a significant negative association with the likelihood that the firm will pay out dividends (at the 5% significance level). The other controlling variables were insignificant in relation to the firm's likelihood to payout dividend.

Similar to the first two tobit regression models, the strong significant negative association between firm R&D and dividend payout shows that the more that the firm invests in R&D, the less probability there is that it will pay out dividends.

**Table 6.6** Marginal Effects after Logit Regression of Dividend Payout Dummy

variable	dy/dx	Std. Err.	z	P> z	[	95% C.I.	]	x
totalc~e	-.0004614	.0015	-0.31	0.759	-.00341	.002487		38.526
size	.1164396	.37912	0.31	0.759	-.626626	.859505		8.70464
mtb	.0057885	.01931	0.30	0.764	-.032061	.043638		2.71623
bklev	.0623811	.21051	0.30	0.767	-.350211	.474974		.217264
rda	-1.976268	6.4367	-0.31	0.759	-14.592	10.6394		.039577
Capex	.2442031	.81913	0.30	0.766	-1.36126	1.84966		.06211
tenure	-.0053153	.01733	-0.31	0.759	-.039284	.028653		7.51445
_Isic~13*	-.9238056	2.86918	-0.32	0.747	-6.5473	4.69969		.062193
_Isic~16*	-.8521432	1.32977	-0.64	0.522	-3.45844	1.75416		.00982
_Isic~20*	-.9271627	3.22542	-0.29	0.774	-7.24887	5.39455		.073977
_Isic~23*	-.8653404	1.89528	-0.46	0.648	-4.58002	2.84934		.01964
_Isic~26*	-.8755707	2.38385	-0.37	0.713	-5.54784	3.7967		.029133
_Isic~28*	-.9710561	2.39227	-0.41	0.685	-5.65983	3.71771		.138462
_Isic~30*	-.8595312	1.59279	-0.54	0.589	-3.98135	2.26229		.014403
_Isic~33*	-.8747999	2.28492	-0.38	0.702	-5.35316	3.60356		.027496
_Isic~35*	-.9554714	2.69963	-0.35	0.723	-6.24665	4.33571		.101473
_Isic~36*	-.9521952	2.78566	-0.34	0.732	-6.41199	4.5076		.097545
_Isic~37*	-.8924363	3.19866	-0.28	0.780	-7.1617	5.37683		.047791
_Isic~38*	-.9419841	2.95262	-0.32	0.750	-6.72901	4.84504		.085106

**Table 6.6** (Continued)

<b>variable</b>	<b>dy/dx</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>	[	<b>95% C.I.</b>	]	<b>x</b>
_Isic~45*	-.8471734	1.19564	-0.71	0.479	-3.19059	1.49624	.007529	
_Isic~48*	-.8826648	2.22503	-0.40	0.692	-5.24365	3.47832	.028805	
_Isic~53*	-.8793792	2.079	-0.42	0.672	-4.95414	3.19538	.025532	
_Isic~54*	-.8727405	1.77923	-0.49	0.624	-4.35997	2.61449	.019313	
_Isic~56*	-.8659051	1.93362	-0.45	0.654	-4.65573	2.92392	.020295	
_Isic~57*	-.8533181	1.39177	-0.61	0.540	-3.58114	1.8745	.010802	
_Isic~58*	-.8571685	1.52284	-0.56	0.574	-3.84189	2.12755	.013093	
_Isic~59*	-.8853323	2.1811	-0.41	0.685	-5.16022	3.38955	.028805	
_Isic~73*	-.9551881	2.68306	-0.36	0.722	-6.2139	4.30352	.100164	
_Isic~78*	-.8436226	1.01943	-0.83	0.408	-2.84167	1.15443	.00491	
_Isic~79*	-.8402276	.98671	-0.85	0.394	-2.77415	1.09369	.004255	
_Isic~80*	-.8674606	1.66847	-0.52	0.603	-4.13761	2.40268	.016694	
_Isic~87*	-.8395429	.99951	-0.84	0.401	-2.79854	1.11945	.004255	
_IY~1993*	-.0210221	.08561	-0.25	0.806	-1.188824	.14678	.054664	
_IY~1994*	-.0359068	.12446	-0.29	0.773	-2.280229	.208415	.057283	
_IY~1995*	-.1265433	.34769	-0.36	0.716	-8.808003	.554917	.05892	
_IY~1996*	-.2171613	.50233	-0.43	0.666	-1.20171	.767383	.061538	
_IY~1997*	-.2039183	.48474	-0.42	0.674	-1.15399	.746155	.06252	
_IY~1998*	-.2362627	.52725	-0.45	0.654	-1.26965	.797129	.066448	
_IY~1999*	-.2975113	.57998	-0.51	0.608	-1.43426	.839233	.067103	
_IY~2000*	-.3592814	.60105	-0.60	0.550	-1.53732	.818761	.070704	
_IY~2001*	-.3804342	.60048	-0.63	0.526	-1.55735	.796481	.071686	
_IY~2002*	-.4119762	.595	-0.69	0.489	-1.57816	.754205	.075614	
_IY~2003*	-.4049123	.5988	-0.68	0.499	-1.57854	.768719	.076596	
_IY~2004*	-.35989	.6069	-0.59	0.553	-1.5494	.829617	.077905	
_IY~2005*	-.3377894	.60356	-0.56	0.576	-1.52075	.845174	.077905	
_IY~2006*	-.316156	.59234	-0.53	0.594	-1.47712	.84481	.072013	

(\*) dy/dx is for discrete change of dummy variable from 0 to 1  
mfx compute, at(totalcrite = 1)

Marginal effects after logit

y = Pr(dv_pay) (predict)								
= .84876917								
totalc~e	-.000424	.00145	-0.29	0.770	-.003269	.002421	1	
size	.1070109	.36591	0.29	0.770	-.610168	.82419	8.70464	

**Table 6.6** (Continued)

<b>variable</b>	<b>dy/dx</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>	[	<b>95% C.I.</b>	]	<b>x</b>
mtb	.0053198	.0186	0.29	0.775	-.031127	.041767		2.71623
bklev	.0573298	.20255	0.28	0.777	-.339654	.454314		.217264
rda	-1.816241	6.21251	-0.29	0.770	-13.9925	10.3601		.039577
Capex	.2244288	.78848	0.28	0.776	-1.32096	1.76982		.06211
tenure	-.0048849	.01673	-0.29	0.770	-.037666	.027897		7.51445
_Isic~13*	-.9320843	2.58106	-0.36	0.718	-5.99087	4.12671		.062193
_Isic~16*	-.8670905	1.21631	-0.71	0.476	-3.25101	1.51683		.00982
_Isic~20*	-.9350951	2.90287	-0.32	0.747	-6.62462	4.75443		.073977
_Isic~23*	-.8791404	1.72955	-0.51	0.611	-4.269	2.51072		.01964
_Isic~26*	-.8884505	2.17354	-0.41	0.683	-5.14851	3.37161		.029133
_Isic~28*	-.9743359	2.13163	-0.46	0.648	-5.15226	3.20359		.138462
_Isic~30*	-.8738418	1.45436	-0.60	0.548	-3.72433	1.97665		.014403
_Isic~33*	-.8877528	2.08203	-0.43	0.670	-4.96846	3.19296		.027496
_Isic~35*	-.960455	2.41117	-0.40	0.690	-5.68625	3.76534		.101473
_Isic~37*	-.9037325	2.91851	-0.31	0.757	-6.6239	4.81643		.047791
_Isic~38*	-.9483958	2.6458	-0.36	0.720	-6.13408	4.23729		.085106
_Isic~45*	-.8625419	1.09492	-0.79	0.431	-3.00854	1.28346		.007529
_Isic~48*	-.8949064	2.02051	-0.44	0.658	-4.85503	3.06521		.028805
_Isic~53*	-.8919221	1.88937	-0.47	0.637	-4.59503	2.81118		.025532
_Isic~54*	-.8858845	1.6195	-0.55	0.584	-4.06004	2.28828		.019313
_Isic~56*	-.8796547	1.76467	-0.50	0.618	-4.33833	2.57903		.020295
_Isic~57*	-.8681647	1.27266	-0.68	0.495	-3.36254	1.62621		.010802
_Isic~58*	-.8716839	1.39127	-0.63	0.531	-3.59852	1.85515		.013093
_Isic~59*	-.8973285	1.97938	-0.45	0.650	-4.77684	2.98218		.028805
_Isic~73*	-.9602024	2.39648	-0.40	0.689	-5.65723	3.73682		.100164

**Table 6.6** (Continued)

<b>variable</b>	<b>dy/dx</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>	[	<b>95% C.I.</b>	]	<b>x</b>
_Isic~78*	-.8592893	.93435	-0.92	0.358	-2.69057	.971995		.00491
_Isic~79*	-.8561753	.90508	-0.95	0.344	-2.6301	.917749		.004255
_Isic~80*	-.8810756	1.5206	-0.58	0.562	-3.86141	2.09926		.016694
_Isic~87*	-.8555448	.91898	-0.93	0.352	-2.65672	.945631		.004255
_IY~1993*	-.0193632	.08151	-0.24	0.812	-1.179124	.140397		.054664
_IY~1994*	-.0331257	.12028	-0.28	0.783	-2.268879	.202628		.057283
_IY~1995*	-.1179033	.3473	-0.34	0.734	-1.798599	.562793		.05892
_IY~1996*	-.2043864	.51701	-0.40	0.693	-1.21772	.808943		.061538
_IY~1997*	-.1916283	.49658	-0.39	0.700	-1.1649	.781647		.06252
_IY~1998*	-.222802	.54594	-0.41	0.683	-1.29283	.847225		.066448
_IY~1999*	-.2825129	.61417	-0.46	0.646	-1.48627	.921241		.067103
_IY~2000*	-.3435262	.65225	-0.53	0.598	-1.62191	.934858		.070704
_IY~2001*	-.364616	.65763	-0.55	0.579	-1.65356	.924324		.071686
_IY~2002*	-.3961857	.66067	-0.60	0.549	-1.69107	.8987		.075614
_IY~2003*	-.3890527	.66237	-0.59	0.557	-1.68728	.90917		.076596
_IY~2004*	-.3439909	.65752	-0.52	0.601	-1.63271	.94473		.077905
_IY~2005*	-.3220558	.64792	-0.50	0.619	-1.59196	.947844		.077905
_IY~2006*	-.3007827	.63123	-0.48	0.634	-1.53798	.936412		.072013
mfx compute, at(totalcite = 8)								
Marginal effects after logit								
y = Pr(dv_pay) (predict)								
= .84577692								
totalc~e	-.0004309	.00146	-0.29	0.768	-0.003296	.002434		8
size	.1087435	.36853	0.30	0.768	-.613567	.831054		8.70464
mtb	.0054059	.01874	0.29	0.773	-.031317	.042129		2.71623

**Table 6.6** (Continued)

<b>variable</b>	<b>dy/dx</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>	[	<b>95% C.I.</b>	]	<b>x</b>
bklev	.0582581	.20411	0.29	0.775	-.341784	.4583	.217264	
rda	-1.845647	6.25695	-0.29	0.768	-14.109	10.4178	.039577	
_Isic~13*	-.9306061	2.63288	-0.35	0.724	-6.09096	4.22975	.062193	
_Isic~16*	-.8644029	1.23706	-0.70	0.485	-3.28899	1.56019	.00982	
_Isic~20*	-.9336792	2.96083	-0.32	0.753	-6.7368	4.86945	.073977	
_Isic~23*	-.8766623	1.75984	-0.50	0.618	-4.32589	2.57257	.01964	
_Isic~26*	-.88614	2.21175	-0.40	0.689	-5.22108	3.4488	.029133	
_Isic~28*	-.973753	2.17804	-0.45	0.655	-5.24264	3.29513	.138462	
_Isic~30*	-.8712705	1.47963	-0.59	0.556	-3.7713	2.02876	.014403	
_Isic~33*	-.885429	2.11891	-0.42	0.676	-5.03842	3.26756	.027496	
_Isic~35*	-.9595678	2.46283	-0.39	0.697	-5.78663	3.86749	.101473	
_Isic~36*	-.9565792	2.54289	-0.38	0.707	-5.94055	4.02739	.097545	
_Isic~37*	-.9017097	2.9691	-0.30	0.761	-6.72103	4.91761	.047791	
_Isic~38*	-.947253	2.7008	-0.35	0.726	-6.24072	4.34622	.085106	
_Isic~45*	-.8597772	1.11336	-0.77	0.440	-3.04192	1.32237	.007529	
_Isic~48*	-.8927118	2.05765	-0.43	0.664	-4.92562	3.1402	.028805	
_Isic~53*	-.8896728	1.92383	-0.46	0.644	-4.66032	2.88097	.025532	
_Isic~54*	-.8835259	1.64857	-0.54	0.592	-4.11466	2.34761	.019313	
_Isic~56*	-.8771858	1.79545	-0.49	0.625	-4.39621	2.64183	.020295	
_Isic~57*	-.8654955	1.29444	-0.67	0.504	-3.40255	1.67155	.010802	
_Isic~58*	-.8690752	1.4153	-0.61	0.539	-3.64302	1.90487	.013093	
_Isic~59*	-.8951785	2.01599	-0.44	0.657	-4.84644	3.05609	.028805	
_Isic~73*	-.9593098	2.44772	-0.39	0.695	-5.75675	3.83813	.100164	
_Isic~78*	-.85647	.94994	-0.90	0.367	-2.71831	1.00537	.00491	
_Isic~79*	-.8533045	.92005	-0.93	0.354	-2.65657	.949962	.004255	

**Table 6.6** (Continued)

<b>variable</b>	<b>dy/dx</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>	[	<b>95% C.I.</b>	]	<b>x</b>
_IY~1996*	-.2067969	.51494	-0.40	0.688	-1.21606	.802465	.061538	
_IY~1997*	-.193943	.495	-0.39	0.695	-1.16412	.776233	.06252	
_IY~1998*	-.2253479	.54317	-0.41	0.678	-1.28994	.839246	.066448	
_IY~1999*	-.2853749	.60863	-0.47	0.639	-1.47827	.907525	.067103	
_IY~2000*	-.3465619	.64359	-0.54	0.590	-1.60798	.914854	.070704	
_IY~2001*	-.3676749	.64787	-0.57	0.570	-1.63747	.902118	.071686	
_IY~2002*	-.3992557	.6493	-0.61	0.539	-1.67186	.873349	.075614	
_IY~2003*	-.3921315	.6514	-0.60	0.547	-1.66885	.88459	.076596	
_IY~2004*	-.3470523	.64898	-0.53	0.593	-1.61902	.924916	.077905	
_IY~2005*	-.3250744	.64053	-0.51	0.612	-1.58049	.930342	.077905	
_IY~2006*	-.3037236	.62484	-0.49	0.627	-1.52839	.920946	.072013	

(\*) dy/dx is for discrete change of dummy variable from 0 to 1

mfx compute, at(totalcrite = 29)

Marginal effects after logit

y = Pr(dv_pay) (predict)								
= .83650941								
totalc~e	-.0004518	.00149	-0.30	0.762	-.003376	.002473		29
size	.114015	.37608	0.30	0.762	-.623095	.851125		8.70464
rda	-1.935117	6.38512	-0.30	0.762	-14.4497	10.5795		.039577
Capex	.239118	.81197	0.29	0.768	-1.35231	1.83054		.06211
tenure	-.0052046	.01719	-0.30	0.762	-.0389	.028491		7.51445
_Isic~13*	-.925991	2.7937	-0.33	0.740	-6.40155	4.54957		.062193
_Isic~16*	-.8560643	1.30046	-0.66	0.510	-3.40492	1.69279		.00982
_Isic~20*	-.9292573	3.14079	-0.30	0.767	-7.0851	5.22659		.073977

**Table 6.6** (Continued)

<b>variable</b>	<b>dy/dx</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>	[	<b>95% C.I.</b>	]	<b>x</b>
_Isic~23*	-.8689648	1.85238	-0.47	0.639	-4.49956	2.76163	.01964	
_Isic~26*	-.8789565	2.3292	-0.38	0.706	-5.44411	3.6862	.029133	
_Isic~28*	-.9719255	2.32334	-0.42	0.676	-5.52558	3.58173	.138462	
_Isic~30*	-.8632877	1.55697	-0.55	0.579	-3.9149	2.18832	.014403	
_Isic~33*	-.8782046	2.23223	-0.39	0.694	-5.25329	3.49688	.027496	
_Isic~35*	-.9567905	2.6236	-0.36	0.715	-6.09894	4.18536	.101473	
_Isic~36*	-.9536066	2.70766	-0.35	0.725	-6.26053	4.35332	.097545	
_Isic~37*	-.8954106	3.12545	-0.29	0.775	-7.02118	5.23036	.047791	
_Isic~38*	-.9436793	2.87191	-0.33	0.742	-6.57252	4.68516	.085106	
_Isic~53*	-.8826774	2.02973	-0.43	0.664	-4.86088	3.09553	.025532	
_Isic~54*	-.8761947	1.73779	-0.50	0.614	-4.2822	2.52981	.019313	
_Isic~56*	-.8695164	1.88985	-0.46	0.645	-4.57354	2.83451	.020295	
_Isic~57*	-.8572132	1.36099	-0.63	0.529	-3.52471	1.81029	.010802	
_Isic~58*	-.860978	1.48881	-0.58	0.563	-3.779	2.05704	.013093	
_Isic~59*	-.8884884	2.12863	-0.42	0.676	-5.06053	3.28355	.028805	
_Isic~73*	-.9565153	2.6075	-0.37	0.714	-6.06712	4.15409	.100164	
_Isic~80*	-.871037	1.63017	-0.53	0.593	-4.06611	2.32403	.016694	
_Isic~87*	-.8437361	.97874	-0.86	0.389	-2.76204	1.07457	.004255	
_IY~1993*	-.0205965	.08461	-0.24	0.808	-.186438	.145245	.054664	
_IY~1994*	-.0351943	.12365	-0.28	0.776	-.277535	.207146	.057283	
_IY~1995*	-.1243518	.34807	-0.36	0.721	-.806561	.557858	.05892	
_IY~1996*	-.2139567	.5069	-0.42	0.673	-1.20745	.779541	.061538	
_IY~1997*	-.2008299	.48854	-0.41	0.681	-1.15835	.756689	.06252	
_IY~1998*	-.2328936	.5329	-0.44	0.662	-1.27735	.811564	.066448	
_IY~1999*	-.2937892	.58971	-0.50	0.618	-1.44959	.862016	.067103	

**Table 6.6** (Continued)

<b>variable</b>	<b>dy/dx</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>	[	<b>95% C.I.</b>	]	<b>x</b>
_IY~2000*	-.355408	.61516	-0.58	0.563	-1.56109	.850276		.070704
_IY~2001*	-.376559	.61609	-0.61	0.541	-1.58408	.830959		.071686
_IY~2002*	-.4081284	.61275	-0.67	0.505	-1.60909	.792837		.075614
_IY~2003*	-.4010419	.61604	-0.65	0.515	-1.60846	.806379		.076596
_IY~2004*	-.3559786	.62086	-0.57	0.566	-1.57285	.860893		.077905
_IY~2005*	-.333905	.61593	-0.54	0.588	-1.5411	.873286		.077905
_IY~2006*	-.3123499	.60329	-0.52	0.605	-1.49477	.870074		.072013
mfx compute, at(totalcite = 594)								
Marginal effects after logit								
y = Pr(dv_pay) (predict)								
= .44176888								
totalc~e	-.0008147	.00048	-1.70	0.089	-.001753	.000124		594
size	.2055926	.11806	1.74	0.082	-.025803	.436988		8.70464
mtb	.0102205	.00944	1.08	0.279	-.008284	.028725		2.71623
bklev	.1101438	.11687	0.94	0.346	-.118909	.339197		.217264
rda	-3.489416	2.02579	-1.72	0.085	-7.45989	.481064		.039577
Capex	.4311793	.42651	1.01	0.312	-.404763	1.26712		.06211
tenure	-.009385	.00564	-1.66	0.096	-.020443	.001673		7.51445
_Isic~13*	-.6593296	9.14376	-0.07	0.943	-18.5808	17.2621		.062193
_Isic~16*	-.4791422	2.63515	-0.18	0.856	-5.64394	4.68566		.00982
_Isic~20*	-.670273	10.5	-0.06	0.949	-21.2491	19.9085		.073977
_Isic~23*	-.5063664	4.05208	-0.12	0.901	-8.44829	7.43555		.01964
_Isic~26*	-.5290912	5.40432	-0.10	0.922	-11.1214	10.0632		.029133
_Isic~28*	-.8427955	11.211	-0.08	0.940	-22.8153	21.1297		.138462
_Isic~30*	-.494106	3.29864	-0.15	0.881	-6.95932	5.97111		.014403

**Table 6.6** (Continued)

<b>variable</b>	<b>dy/dx</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>	[	<b>95% C.I.</b>	]	<b>x</b>
_Isic~33*	-.5272995	5.17035	-0.10	0.919	-10.661	9.60639	.027496	
_Isic~35*	-.7740517	11.075	-0.07	0.944	-22.4805	20.9324	.101473	
_Isic~36*	-.7607714	11.113	-0.07	0.945	-22.542	21.0204	.097545	
_Isic~37*	-.5701622	7.95916	-0.07	0.943	-16.1698	15.0295	.047791	
_Isic~38*	-.7216223	10.828	-0.07	0.947	-21.9434	20.5002	.085106	
_Isic~45*	-.4694423	2.30149	-0.20	0.838	-4.98028	4.0414	.007529	
_Isic~48*	-.5456094	5.32708	-0.10	0.918	-10.9865	9.89527	.028805	
_Isic~53*	-.5378234	4.87264	-0.11	0.912	-10.088	9.01237	.025532	
_Isic~54*	-.5225879	3.99748	-0.13	0.896	-8.3575	7.31232	.019313	
_Isic~56*	-.5075848	4.14598	-0.12	0.903	-8.63355	7.61838	.020295	
_Isic~57*	-.4814791	2.77721	-0.17	0.862	-5.92471	4.96175	.010802	
_Isic~58*	-.4892492	3.10926	-0.16	0.875	-6.58329	5.60479	.013093	
_Isic~59*	-.5520458	5.31357	-0.10	0.917	-10.9665	9.86237	.028805	
_Isic~73*	-.7728827	10.983	-0.07	0.944	-22.2993	20.7536	.100164	
_Isic~78*	-.4626783	1.92272	-0.24	0.810	-4.23114	3.30578	.00491	
_Isic~79*	-.4563507	1.82532	-0.25	0.803	-4.03392	3.12122	.004255	
_Isic~80*	-.5109217	3.62709	-0.14	0.888	-7.61988	6.59804	.016694	
_Isic~87*	-.4551068	1.8245	-0.25	0.803	-4.03106	3.12085	.004255	
_IY~1993*	-.0352682	.08971	-0.39	0.694	-.211092	.140555	.054664	
_IY~1994*	-.0582085	.09648	-0.60	0.546	-.247296	.130879	.057283	
_IY~1995*	-.1699847	.23177	-0.73	0.463	-.62425	.284281	.05892	
_IY~1996*	-.2495289	.40899	-0.61	0.542	-1.05113	.55207	.061538	
_IY~1997*	-.239563	.38311	-0.63	0.532	-.990452	.511326	.06252	
_IY~1998*	-.2644329	.44468	-0.59	0.552	-1.13598	.607115	.066448	
_IY~1999*	-.3045458	.55669	-0.55	0.584	-1.39564	.786552	.067103	

**Table 6.6** (Continued)

<b>variable</b>	<b>dy/dx</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>	[	<b>95% C.I.</b>	]	<b>x</b>
_IY~2004*	-.3428244	.65897	-0.52	0.603	-1.63438	.948734	.077905	
_IY~2005*	-.3309375	.62288	-0.53	0.595	-1.55177	.889892	.077905	
_IY~2006*	-.316901	.58814	-0.54	0.590	-1.46963	.83583	.072013	

**Note:** 1. Summarize Totalcite, Detail

```

reputation

Percentiles      Smallest
 1%              0              0
 5%              0              0
10%              0              0      Obs            4219
25%              1              0      Sum of Wgt.   4219

50%              8              Mean        33.84688
                      Largest     Std. Dev.    81.3546
 75%             29              594
 90%             79              594      Variance     6618.57
 95%            138              594      Skewness     4.905338
 99%            547              594      Kurtosis    30.09604

mfx compute

Marginal effects after logit
y = Pr(dv_pay) (predict)
= .83215996

```

2. (\*) dy/dx is for discrete change of dummy variable from 0 to 1

Table 6.6 shows the marginal effects after the logit regression model based on Table 6.5. The marginal effects imply that, holding other factors constant at the mean level, a marginal change in the number of times that the firm's CEO has been cited from the average of approximately 34 times cited is associated with approximately a 0.04% lower probability that the firm will pay out dividends. Whereas a marginal increase in firm size from its average of 8.7 is associated with a 11.64% increase in

the probability to pay out. The probability of paying out dividends is most sensitive to the R&D variable. A marginal increase in the firm's R&D from the average is associated with a 198% lower probability of paying out dividends.

Due to the non-normality distribution of the total citations, the further marginal effects based on each quartile of total citations have been conducted. The results show that at the first quartile, the second quartile (the median), and the third quartile, a marginal increase in total citations is associated with a 0.04% - 0.05% decrease in the probability to pay out, at the last quartile, a marginal increase in total citations is associated with a 0.08% decrease in the probability to pay out.

**Table 6.7** Logit Regression of Dividend Payout Dummy on CEO's Reputation  
(Panel Data)

<b>dv_pay</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>	<b>[95% Conf. Interval]</b>	
totalcite	-.0062466	.0015804	-3.95	0.000	-.0093442	-.0031491
size	.581845	.1461366	3.98	0.000	.2954226	.8682673
mtb	.0059463	.0697355	0.09	0.932	-.1307328	.1426255
bklev	-.5293364	.910135	-0.58	0.561	-2.313168	1.254495
rda	-8.25638	4.285136	-1.93	0.054	-16.65509	.1423316
Capex	4.602841	2.965347	1.55	0.121	-1.209133	10.41481
tenure	.0133669	.0172594	0.77	0.439	-.0204609	.0471948
_cons	1.437173	1.46322	0.98	0.326	-1.430685	4.30503
/lnsig2u	4.219666	.1728722			3.880842	4.558489
sigma_u	8.246863	.7128268			6.961683	9.769298
rho	.9538592	.0076084			.9364337	.9666778

**Note:** 1. . . xtlogit dv\_pay totalcite size mtb bklev rda Capex tenure

Fitting comparison model:

```

Iteration 0:  log likelihood = -2089.3104
Iteration 1:  log likelihood = -1696.4892
Iteration 2:  log likelihood = -1674.3968
Iteration 3:  log likelihood = -1674.327

```

```
Iteration 4: log likelihood = -1674.327
```

```
Fitting full model:
```

```
tau = 0.0      log likelihood = -1674.327
tau = 0.1      log likelihood = -1484.9624
tau = 0.2      log likelihood = -1340.027
tau = 0.3      log likelihood = -1225.7572
tau = 0.4      log likelihood = -1131.6018
```

```
tau = 0.5      log likelihood = -1050.7057
tau = 0.6      log likelihood = -978.86432
tau = 0.7      log likelihood = -912.68645
tau = 0.8      log likelihood = -850.27425
```

```
Iteration 0: log likelihood = -912.52869
Iteration 1: log likelihood = -739.29588
Iteration 2: log likelihood = -725.62264
Iteration 3: log likelihood = -717.52611
Iteration 4: log likelihood = -715.93711
Iteration 5: log likelihood = -715.93711 (backed up)
Iteration 6: log likelihood = -713.11501
Iteration 7: log likelihood = -713.06147
Iteration 8: log likelihood = -713.05894
Iteration 9: log likelihood = -713.05894
```

```
Random-effects logistic regression  Number of obs      =      3834
Group variable: gvkey1           Number of groups   =      317
```

```
Random effects u_i ~ Gaussian     Obs per group: min =       1
                                         avg =      12.1
                                         max =       15
                                         Wald chi2(7) =      28.08
Log likelihood = -713.05894      Prob > chi2 =    0.0002
```

2. Likelihood-ratio test of rho=0: chibar2(01) = 1922.54 Prob >= chibar2 = 0.000

Table 6.7 shows the results of the logit regression, which regresses the dividend payout dummy upon the CEO's reputation and other controlling factors. The dividend payout dummy is a Boolean response variable similar to the regression in Table 6.5. Unlike the logit model in Table 6.5, the logit model in Table 6.7 was conducted after the dataset had been converted into a longitudinal dataset, which is

cross-sectional time series (panel) data. Therefore, the dividend payout dummy is equal to 1 when Firm  $i$  paid dividends in year  $t$ . The intra-class latent correlation Rho for this model was 0.9539, indicating a high correlation between a firm's propensity to pay out dividends in different years, after controlling for the firm's and CEO's characteristics.

Similar to the first three models (the tobit regressions in Table 6.3 – 6.4, and the logit regression in Table 6.5), the panel-logit estimates of the dividend dummy show negative, significant effects regarding the CEO's reputation. The results imply that the CEO's reputation decreases the likelihood that the firm will pay dividends. These results also support the investment hypothesis, which predicts that reputable CEOs tend to use funds to make more investments rather than to pay out dividends.

For the controlling variables, the results show that firm size is the only variable that has a significant positive association with the likelihood that the firm will pay out dividends (at the 5% significance level). However, firm R&D has a significant negative association with the likelihood that the firm will payout dividends (at the 10% significance level). The other controlling variables were insignificant to the firm's likelihood to payout dividends.

Similar to the other three models (the tobit regressions in Table 6.3 – 6.4, and the logit regression in Table 6.5), the negative association between firm R&D and dividend payout presented in this panel-logit model shows that the firm that invests more in R&D will have less probability of paying out dividends. It also supports the investment hypothesis whereby reputable CEOs are less likely to pay out dividends because they tend to use the available internal funds to make more R&D expenditures, which implies that reputable CEOs tend to be confident that their investments will turn out to be successful.

**Table 6.8** Marginal Effects after Logit Regression of Dividend Payout Dummy  
(Panel Data)

variable	dy/dx	Std. Err.	z	P> z	[	95% C.I.	]	x
totalc~e	-.0062466	.00158	-3.95	0.000	-.009344	-.003149	35.7645	
size	.581845	.14614	3.98	0.000	.295423	.868267	8.75879	
mtb	.0059463	.06974	0.09	0.932	-.130733	.142625	2.57737	
bklev	-.5293364	.91014	-0.58	0.561	-2.31317	1.2545	.222886	
rda	-8.25638	4.28514	-1.93	0.054	-16.6551	.142332	.032513	
Capex	4.602841	2.96535	1.55	0.121	-1.20913	10.4148	.06126	
tenure	.0133669	.01726	0.77	0.439	-.020461	.047195	7.48072	

mfx compute, at(totalcrite = 1)

Marginal effects after xtlogit

```

y = Linear prediction (predict)
= 6.5380545

totalc~e   -.0062466    .00158   -3.95   0.000  -.009344  -.003149      1
size       .581845     .14614    3.98   0.000   .295423   .868267  8.75879
mtb        .0059463    .06974    0.09   0.932  -.130733   .142625  2.57737
bklev     -.5293364    .91014   -0.58   0.561  -2.31317   1.2545  .222886
rda        -8.25638    4.28514  -1.93   0.054  -16.6551   .142332  .032513
Capex     4.602841    2.96535   1.55   0.121  -1.20913  10.4148  .06126
tenure    .0133669    .01726    0.77   0.439  -.020461  .047195  7.48072

```

mfx compute, at(totalcrite = 8)

Marginal effects after xtlogit

```

y = Linear prediction (predict)
= 6.4943281

totalc~e   -.0062466    .00158   -3.95   0.000  -.009344  -.003149      8
size       .581845     .14614    3.98   0.000   .295423   .868267  8.75879

```

**Table 6.8** (Continued)

<b>variable</b>	<b>dy/dx</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>	[	<b>95% C.I.</b>	]	<b>x</b>
mtb	.0059463	.06974	0.09	0.932	-.130733	.142625	2.57737	
bklev	-.5293364	.91014	-0.58	0.561	-2.31317	1.2545	.222886	
rda	-8.25638	4.28514	-1.93	0.054	-16.6551	.142332	.032513	
Capex	4.602841	2.96535	1.55	0.121	-1.20913	10.4148	.06126	
tenure	.0133669	.01726	0.77	0.439	-.020461	.047195	7.48072	
mfx compute, at(totalcite = 29)								
Marginal effects after xtlogit								
y = Linear prediction (predict)								
= 6.3631486								
totalc~e	-.0062466	.00158	-3.95	0.000	-.009344	-.003149	29	
size	.581845	.14614	3.98	0.000	.295423	.868267	8.75879	
mtb	.0059463	.06974	0.09	0.932	-.130733	.142625	2.57737	
bklev	-.5293364	.91014	-0.58	0.561	-2.31317	1.2545	.222886	
rda	-8.25638	4.28514	-1.93	0.054	-16.6551	.142332	.032513	
Capex	4.602841	2.96535	1.55	0.121	-1.20913	10.4148	.06126	
tenure	.0133669	.01726	0.77	0.439	-.020461	.047195	7.48072	
mfx compute, at(totalcite = 594)								
Marginal effects after xtlogit								
y = Linear prediction (predict)								
= 2.8337973								
totalc~e	-.0062466	.00158	-3.95	0.000	-.009344	-.003149	594	
size	.581845	.14614	3.98	0.000	.295423	.868267	8.75879	
mtb	.0059463	.06974	0.09	0.932	-.130733	.142625	2.57737	
bklev	-.5293364	.91014	-0.58	0.561	-2.31317	1.2545	.222886	

**Table 6.8** (Continued)

<b>variable</b>	<b>dy/dx</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>	[	<b>95% C.I.</b>	]	<b>x</b>
rda	-8.25638	4.28514	-1.93	0.054	-16.6551	.142332	.032513	
Capex	4.602841	2.96535	1.55	0.121	-1.20913	10.4148	.06126	
tenure	.0133669	.01726	0.77	0.439	-.020461	.047195	7.48072	

**Note:** summarize Totalcite, Detail

reputation

	Percentiles	Smallest		
1%	0	0		
5%	0	0		
10%	0	0	Obs	4219
25%	1	0	Sum of Wgt.	4219
50%	8		Mean	33.84688
		Largest	Std. Dev.	81.3546
75%	29	594		
90%	79	594	Variance	6618.57
95%	138	594	Skewness	4.905338
99%	547	594	Kurtosis	30.09604

. mfx compute

```
Marginal effects after xtlogit
y = Linear prediction (predict)
= 6.3208934
```

Table 6.8 shows the marginal effects after the logit regression model based on Table 6.7. The marginal effects imply that a marginal change in the number of times that the firm's CEO has been cited is associated with approximately a 0.63% lower probability that the firm will pay out dividends. On the other hand, a marginal increase in firm size is associated with a 58.18% increase in the probability to pay out.

The probability of paying out dividends is most sensitive to the R&D variable. A marginal increase in the firm's R&D is associated with a 826% lower probability of paying out dividends.

The estimated logit regression coefficient of total citations equal to -0.00625 can be interpreted as, assuming all other variables are held constant, for any unit increase in total citations, the estimated ratio of the odds of paying out dividend for firm is equal to  $\exp(-0.00625)$  which is 0.9938. And this odds can be transformed to the expected probability (or propensity) that the firm will pay dividend equal to 0.4984.

**Table 6.9** Logit Regression of Dividend Payout Dummy on CEO's Reputation  
(Fixed-Effect & Panel Data)

<b>dv_pay</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>	<b>[95% Conf. Interval]</b>	
totalcite	-.0043338	.0016221	-2.67	0.008	-.0075131	-.0011546
size	.2817142	.1521696	1.85	0.064	-.0165327	.579961
mtb	.0326552	.06909	0.47	0.636	-.1027587	.168069
bklev	-1.400088	.9612888	-1.46	0.145	-3.28418	.4840033
rda	.1179563	4.522676	0.03	0.979	-8.746325	8.982238
Capex	1.910661	3.085519	0.62	0.536	-4.136844	7.958167
tenure	.0173281	.0177431	0.98	0.329	-.0174477	.0521038

**Note:** 1. xtlogit dv\_pay totalcite size mtb bklev rda Capex tenure,  
i(gvkeyl) fe

2. multiple positive outcomes within groups encountered.

3. 253 groups (3039 obs) dropped because of all positive or  
all negative outcomes.

Iteration 0: log likelihood = -300.27079

Iteration 1: log likelihood = -293.41985

Iteration 2: log likelihood = -293.39107

Iteration 3: log likelihood = -293.39106

```

Conditional fixed-effects logistic regression      Number of obs      =     795
Group variable: gvkeyl                          Number of groups   =      64

Obs per group: min =          4
                           avg =       12.4
                           max =       15
LR chi2(7)                 =    13.36
Prob > chi2                =  0.0637

Log likelihood  = -293.39106

```

```

4. . mfx compute
default predict() is unsuitable for marginal-effect calculation
r(119);

```

Table 6.9 shows the results of the logit regression, which regresses the dividend payout dummy upon the CEO's reputation and other controlling factors. The logit regression in Table 6.9 is identical to the one presented in Table 6.7, with only one exception; the logit regression in Table 6.7 is based on random-effect analysis, which also considers the variation across firms, whereas the logit regression in Table 6.9 incorporates the fix-effect into the model estimates, which takes into account only the variation within the firm over time. In the latter case, the association between the firm's dividend payout and the CEO's reputation will not be distracted by other firm or CEO characteristics.

Similar to the above models, the results from this logit model show a negative, significant association between the firm's propensity to pay dividends and the reputation of the firm's CEO. The results imply that, within a firm, when its CEO reputation increases over time, the likelihood that the firm will pay dividends will decrease over time. These results again support the investment hypothesis.

For the controlling variables, the results show that firm size is the only variable that has a significant positive association with the likelihood that the firm will pay out dividends (at the 10% significance level). However, the other controlling variables are insignificant to the firm's likelihood to payout dividends.

The estimated logit regression coefficient of total citations equal to -0.004334 can be interpreted as, assuming all other variables are held constant, for any unit increase in total citations, the estimated ratio of the odds of paying out dividend for firm is equal to  $\exp(-0.004334)$  which is 0.9957. And this odds can be transformed to

the expected probability (or propensity) that the firm will pay dividend equal to 0.4989. This result based on the fixed-effect is approximately the same as the result based on the random-effect logistic regression.

**Table 6.10** Linear Regression of Dividend to Total Assets on CEO's Reputation

		Robust				
dv_ta	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
totalcite	-.0000254	5.84e-06	-4.35	0.000	-.0000369	-.0000139
size	.0026925	.0008357	3.22	0.001	.0010482	.0043368
mtb	.0039396	.0013916	2.83	0.005	.0012016	.0066775
bklev	.0052678	.0091395	0.58	0.565	-.0127141	.0232497
rda	-.0687984	.0270665	-2.54	0.012	-.1220518	-.0155451
Capex	-.0369885	.0125578	-2.95	0.003	-.0616959	-.012281
tenure	-.0001809	.0000908	-1.99	0.047	-.0003596	-2.20e-06
_cons	-.0125732	.0069131	-1.82	0.070	-.0261748	.0010284

**Note:** . xi: reg dv\_ta totalcite size mtb bklev rda Capex tenure, robust cluster(gvkey)

Linear regression	Number of obs =	3834
	F(7316) =	9.82
	Prob > F =	0.0000
	R-squared =	0.0972
	Root MSE =	.02099

(Std. Err. adjusted for 317 clusters in gvkey1)

Table 6.10 shows the results of the linear regression, which regresses the dividend to total assets ratio on the CEO's reputation and other controlling factors. Since the data set has a cluster structure and observations in the same clusters tend to have similar characteristics and are more likely correlated with each other, these regression results are based on robust standard error estimates. The observations are clustered at the firm level in order to eliminate intra-firm correlations and therefore correct for heteroskedasticity in the error terms.

The linear regression model estimates of dividend to total assets ratio show negative, significant effects regarding the CEO's reputation. The results imply that when the CEO's reputation is high, the firm will pay lower dividends in relation to the percentage of its total assets. These results support the investment hypothesis, which predicts that reputable CEOs tend to use funds to make more investments rather than to pay out dividends.

For the controlling variables, the results show that, at the 5% significance level, the market-to-book value ratio has a significant positive association with the dividend to total assets ratio, and at the 10% significant level, firm size has a significant positive association with the dividend to total assets ratio. However, at the 5% significance level, firm R&D expenditure has a significant negative association with the dividend to total assets ratio. The firm book leverage, capital expenditures, and CEO tenure have an insignificant association with the dividend to total assets ratio.

**Table 6.11** Linear Regression of Dividend to Sales on CEO's Reputation

	Robust					
dv_sale	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
totalcite	-.0000224	7.32e-06	-3.06	0.002	-.0000368	-7.97e-06
size	.0042577	.0010248	4.15	0.000	.0022414	.006274
mtb	.0032624	.001015	3.21	0.001	.0012654	.0052593
bklev	.0166502	.0104369	1.60	0.112	-.0038845	.0371849
rda	-.034143	.0250004	-1.37	0.173	-.0833312	.0150452
Capex	-.0431959	.0208296	-2.07	0.039	-.0841782	-.0022137
tenure	-.0002012	.0000943	-2.13	0.034	-.0003868	-.0000156
cons	-.0264061	.0090809	-2.91	0.004	-.0442728	-.0085394

**Note:** . xi: reg dv\_sale totalcite size mtb bklev rda Capex  
tenure, robust cluster(gvkey) robust  
. xi: reg dv\_sale totalcite size mtb bklev rda Capex tenure cluster(gvkey)

Linear regression  
Number of obs = 3834  
F(7316) = 10.81  
Prob > F = 0.0000  
R-squared = 0.0856  
Root MSE = .02433  
(Std. Err. adjusted for 317 clusters in gvkey1)

Table 6.11 shows the results of the linear regression, which regresses the dividend to sales ratio on the CEO's reputation and other controlling factors. Similar to the model presented in Table 6.10, this regression model is also based on robust standard error estimates. The observations are clustered at the firm level in order to eliminate intra-firm correlations.

The linear regression model estimates of the dividend to sales ratio show negative, significant effects regarding the CEO's reputation (at the 10% level of significance). The results imply that when the CEO's reputation is high, the firm will pay lower dividends in relation to the percentage of its sales. These results support the investment hypothesis, which predicts that reputable CEOs tend to use funds to make more investments rather than to pay out dividends.

For the controlling variables, the results show that, at the 5% significance level, firm size and market-to-book value ratio has a significant positive association with the dividend to sales ratio. However, at the 10% significance level, the firm's R&D expenditure and capital expenditure have a significant negative association with the dividend to sales ratio. The firm book leverage and CEO tenure have a insignificant association with the dividend to sales ratio.

**Table 6.12** The Variance Inflation Factor (VIF) Check for Multicollinearity

Variable	VIF	1/VIF
size	1.31	0.762521
mtb	1.27	0.788211
bklev	1.24	0.808637
rda	1.22	0.818131
totalcite	1.19	0.843664
tenure	1.03	0.967499
Capex	1.02	0.977032
Mean VIF	1.18	

Table 6.12 reports the Variance Inflation Factor (VIF) and the tolerance (1/VIF) in order to check if there was any multicollinearity among the predictors. The results in Table 6.12 show that all of the VIFs were less than 5, which implies that there was no evidence of multicollinearity problems in any of the above models.

The final section shows the results of all regressions when using the log of total citations plus unity as the proxy for CEO reputation instead of using the total citations itself. Similar to the previous section, the results show that either using the total citations or the log of total citations plus unity, there is a significant negative association between CEO reputation and dividend payout measurements (dividends to total assets, dividends to sales, and dividend payouts dummy).

**Table 6.13** Tobit Regression of Dividend to Total Assets on Log of CEO's Reputation

<b>dv_ta</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>t</b>	<b>P&gt; t </b>	<b>[95% Conf. Interval]</b>
logtotalcite	-.0009045	.0003033	-2.98	0.003	-.0014992 -.0003098
size	.0035482	.0003844	9.23	0.000	.0027946 .0043018
mtb	.0034344	.0002685	12.79	0.000	.0029079 .0039609
bklev	-.0007789	.0030832	-0.25	0.801	-.0068239 .0052661
rda	-.1227271	.0121676	-10.09	0.000	-.1465828 -.0988714
Capex	-.0158057	.0108849	-1.45	0.147	-.0371465 .0055351
tenure	-.0002203	.0000551	-3.99	0.000	-.0003284 -.0001122
_Isic2d_12	-.0156105	.006625	-2.36	0.019	-.0285994 -.0026217
_Isic2d_13	-.0175009	.0044284	-3.95	0.000	-.0261831 -.0088186
_Isic2d_14	.003744	.0067858	0.55	0.581	-.0095602 .0170482
_Isic2d_15	-.0194606	.005122	-3.80	0.000	-.0295028 -.0094184
_Isic2d_16	-.0258131	.0059905	-4.31	0.000	-.0375581 -.0140682
_Isic2d_20	.0040905	.0043408	0.94	0.346	-.0044201 .0126012
_Isic2d_21	.0859195	.0056543	15.20	0.000	.0748338 .0970052
_Isic2d_23	-.0121427	.0049642	-2.45	0.014	-.0218755 -.0024099
_Isic2d_24	.0026908	.0053336	0.50	0.614	-.0077662 .0131478
_Isic2d_25	-.0058168	.0056314	-1.03	0.302	-.0168577 .005224
_Isic2d_26	.0014013	.0046745	0.30	0.764	-.0077636 .0105662
_Isic2d_27	-.005782	.0046801	-1.24	0.217	-.0149578 .0033939
_Isic2d_28	.0022478	.0043141	0.52	0.602	-.0062104 .010706
_Isic2d_29	-.0083942	.0047084	-1.78	0.075	-.0176254 .000837
_Isic2d_30	-.0121536	.0052577	-2.31	0.021	-.0224618 -.0018453

**Table 6.13** (Continued)

<b>dv_ta</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>t</b>	<b>P&gt; t </b>	<b>[95% Conf. Interval]</b>	
_Isic2d_31	-.1686871	.	.	.	.	.
_Isic2d_33	-.0128456	.0047061	-2.73	0.006	-.0220724	-.0036189
_Isic2d_34	-.0038666	.0047909	-0.81	0.420	-.0132597	.0055265
_Isic2d_35	-.0180738	.0043499	-4.16	0.000	-.0266021	-.0095455
_Isic2d_36	-.0160726	.0044211	-3.64	0.000	-.0247406	-.0074047
_Isic2d_37	-.0073069	.0044989	-1.62	0.104	-.0161275	.0015137
_Isic2d_38	-.0122862	.0044057	-2.79	0.005	-.0209239	-.0036485
_Isic2d_39	-.0037123	.0056304	-0.66	0.510	-.0147512	.0073267
_Isic2d_40	-.0193851	.0049613	-3.91	0.000	-.0291122	-.009658
_Isic2d_42	-.0032034	.0084695	-0.38	0.705	-.0198087	.0134019
_Isic2d_44	-.0059752	.0068188	-0.88	0.381	-.019344	.0073937
_Isic2d_45	-.0253732	.0061281	-4.14	0.000	-.037388	-.0133584
_Isic2d_47	.001298	.0060192	0.22	0.829	-.0105032	.0130993
_Isic2d_48	-.0185961	.0046936	-3.96	0.000	-.0277983	-.0093938
_Isic2d_50	.0072003	.0056578	1.27	0.203	-.0038924	.0182929
_Isic2d_51	-.0142737	.0053419	-2.67	0.008	-.0247471	-.0038003
_Isic2d_52	-.0168735	.0051768	-3.26	0.001	-.0270232	-.0067239
_Isic2d_53	-.0226683	.0047933	-4.73	0.000	-.0320659	-.0132707
_Isic2d_54	-.0290777	.0051838	-5.61	0.000	-.039241	-.0189145
_Isic2d_55	-.1618621	.	.	.	.	.
_Isic2d_56	-.0083732	.0049249	-1.70	0.089	-.018029	.0012825
_Isic2d_57	-.0246495	.0056866	-4.33	0.000	-.0357987	-.0135004
_Isic2d_58	-.0162628	.0052988	-3.07	0.002	-.0266517	-.005874
_Isic2d_59	-.0230331	.004769	-4.83	0.000	-.0323831	-.0136831
_Isic2d_70	-.012395	.0084235	-1.47	0.141	-.02891	.00412
_Isic2d_72	.0112603	.0069261	1.63	0.104	-.0023191	.0248396
_Isic2d_73	-.0238773	.0044074	-5.42	0.000	-.0325184	-.0152363
_Isic2d_75	-.0140373	.0068846	-2.04	0.042	-.0275353	-.0005393
_Isic2d_78	-.0464462	.0081719	-5.68	0.000	-.062468	-.0304244
_Isic2d_79	-.0138752	.0072933	-1.90	0.057	-.0281745	.000424
_Isic2d_80	-.0374661	.0055309	-6.77	0.000	-.04831	-.0266222
_Isic2d_82	(omitted)					
_Isic2d_87	-.01788	.0071805	-2.49	0.013	-.031958	-.0038021
_Isic2d_99	-.0229556	.005732	-4.00	0.000	-.0341938	-.0117175
_IYEAR_1993	.0022139	.0021385	1.04	0.301	-.0019789	.0064067
_IYEAR_1994	.0004693	.0021245	0.22	0.825	-.0036959	.0046345
_IYEAR_1995	-.0012325	.0021161	-0.58	0.560	-.0053813	.0029163
_IYEAR_1996	-.0022899	.0021127	-1.08	0.278	-.0064321	.0018523

**Table 6.13** (Continued)

<b>dv_ta</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>t</b>	<b>P&gt; t </b>	<b>[95% Conf. Interval]</b>	
_IYEAR_1997	-.0024962	.002106	-1.19	0.236	-.0066252	.0016328
_IYEAR_1998	-.0046967	.0021012	-2.24	0.025	-.0088163	-.0005771
_IYEAR_1999	-.0062791	.0021067	-2.98	0.003	-.0104095	-.0021486
_IYEAR_2000	-.0063969	.0020956	-3.05	0.002	-.0105055	-.0022883
_IYEAR_2001	-.0057609	.0020855	-2.76	0.006	-.0098497	-.0016721
_IYEAR_2002	-.0071104	.0020746	-3.43	0.001	-.0111779	-.0030429
_IYEAR_2003	-.0069145	.0020808	-3.32	0.001	-.010994	-.002835
_IYEAR_2004	-.0056058	.0020831	-2.69	0.007	-.00969	-.0015216
_IYEAR_2005	-.0032576	.0020798	-1.57	0.117	-.0073352	.00082
_IYEAR_2006	.0005201	.0021316	0.24	0.807	-.003659	.0046993
_cons	-.0045061	.0055027	-0.82	0.413	-.0152947	.0062825
/sigma	.0207768	.0002801			.0202276	.0213259

**Note:** 1. . xi: tobit dv\_ta logtotalcite size mtb bklev rda  
           Capex tenure i.sic2d i.YEAR, ll(0)  
           i.sic2d    \_ISIC2D\_10-99       (naturally coded; \_ISIC2D\_10 omitted)  
           i.YEAR     \_IYEAR\_1992-2006    (naturally coded; \_IYEAR\_1992 omitted)  
 2. \_ISIC2D\_82 omitted because of collinearity

Tobit regression	Number of obs	=	3834
	LR chi2(67)	=	1830.28
	Prob > chi2	=	0.0000
Log likelihood = 6589.554	Pseudo R2	=	-0.1613
3. Obs. summary: 900 left-censored observations at dv_ta<=0			
2934 uncensored observations			
0 right-censored observations			

**Table 6.14** Tobit Regression of Dividend to Sales on Log of CEO's Reputation

<b>dv_sale</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>t</b>	<b>P&gt; t </b>	<b>[95% Conf. Interval]</b>	
logtotalcite	-.0012463	.0003648	-3.42	0.001	-.0019615	-.000531
size	.0055806	.0004641	12.02	0.000	.0046707	.0064905
mtb	.0029019	.000325	8.93	0.000	.0022648	.003539
bklev	.0050235	.0037168	1.35	0.177	-.0022636	.0123106
rda	-.1073948	.0145758	-7.37	0.000	-.1359719	-.0788176
Capex	-.0409699	.0130917	-3.13	0.002	-.0666373	-.0153025
tenure	-.0002828	.0000663	-4.26	0.000	-.0004128	-.0001527
_Isic2d_12	-.0322048	.0079545	-4.05	0.000	-.0478003	-.0166093
_Isic2d_13	-.028291	.0053133	-5.32	0.000	-.0387082	-.0178737
_Isic2d_14	-.0128315	.0081476	-1.57	0.115	-.0288057	.0031427
_Isic2d_15	-.0424829	.0061501	-6.91	0.000	-.0545408	-.030425
_Isic2d_16	-.0508458	.0072826	-6.98	0.000	-.065124	-.0365675
_Isic2d_20	-.0208521	.0052127	-4.00	0.000	-.031072	-.0106322
_Isic2d_21	.047486	.0067896	6.99	0.000	.0341744	.0607976
_Isic2d_23	-.0343434	.0059675	-5.76	0.000	-.0460432	-.0226436
_Isic2d_24	.0262732	.0064041	4.10	0.000	.0137173	.038829
_Isic2d_25	-.0311509	.0067615	-4.61	0.000	-.0444074	-.0178944
_Isic2d_26	-.0221098	.0056129	-3.94	0.000	-.0331144	-.0111052
_Isic2d_27	-.022415	.0056195	-3.99	0.000	-.0334326	-.0113974
_Isic2d_28	-.0148655	.0051801	-2.87	0.004	-.0250216	-.0047094
_Isic2d_29	-.0322947	.0056538	-5.71	0.000	-.0433795	-.0212099
_Isic2d_30	-.0369149	.0063213	-5.84	0.000	-.0493085	-.0245214
_Isic2d_31	-.2071125	.	.	.	.	.
_Isic2d_33	-.0333384	.005651	-5.90	0.000	-.0444179	-.022259
_Isic2d_34	-.025305	.0057524	-4.40	0.000	-.0365832	-.0140268
_Isic2d_35	-.0392092	.0052239	-7.51	0.000	-.0494511	-.0289673
_Isic2d_36	-.0346543	.0053083	-6.53	0.000	-.0450618	-.0242469
_Isic2d_37	-.0312201	.0054023	-5.78	0.000	-.0418119	-.0206283
_Isic2d_38	-.0328637	.0052907	-6.21	0.000	-.0432366	-.0224908
_Isic2d_39	-.0254855	.0067602	-3.77	0.000	-.0387394	-.0122315
_Isic2d_40	-.0304715	.0059575	-5.11	0.000	-.0421517	-.0187912
_Isic2d_42	-.0320984	.0101694	-3.16	0.002	-.0520365	-.0121602
_Isic2d_44	-.0001604	.0081874	-0.02	0.984	-.0162126	.0158918
_Isic2d_45	-.0446959	.0073543	-6.08	0.000	-.0591147	-.0302772
_Isic2d_47	-.0317871	.0072286	-4.40	0.000	-.0459595	-.0176147
_Isic2d_48	-.0321369	.0056311	-5.71	0.000	-.0431771	-.0210966
_Isic2d_50	-.0278435	.0067937	-4.10	0.000	-.0411632	-.0145239
_Isic2d_51	-.0443149	.0064141	-6.91	0.000	-.0568905	-.0317394

**Table 6.14** (Continued)

<b>dv_ta</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>t</b>	<b>P&gt; t </b>	<b>[95% Conf. Interval]</b>	
_Isic2d_52	-.0407571	.0062159	-6.56	0.000	-.0529438	-.0285703
_Isic2d_53	-.0485073	.0057735	-8.40	0.000	-.0598268	-.0371879
_Isic2d_54	-.058356	.006314	-9.24	0.000	-.0707352	-.0459768
_Isic2d_55	-.2029253	.	.	.	.	.
_Isic2d_56	-.0339026	.0059229	-5.72	0.000	-.045515	-.0222902
_Isic2d_57	-.0486671	.0069074	-7.05	0.000	-.0622097	-.0351244
_Isic2d_58	-.0351745	.0063612	-5.53	0.000	-.0476463	-.0227027
_Isic2d_59	-.0495786	.0057534	-8.62	0.000	-.0608588	-.0382984
_Isic2d_70	-.0212318	.010114	-2.10	0.036	-.0410611	-.0014024
_Isic2d_72	-.0040095	.0083162	-0.48	0.630	-.0203142	.0122952
_Isic2d_73	-.0440174	.0052929	-8.32	0.000	-.0543947	-.0336401
_Isic2d_75	-.0317881	.0082668	-3.85	0.000	-.0479959	-.0155802
_Isic2d_78	-.0685517	.0098673	-6.95	0.000	-.0878975	-.049206
_Isic2d_79	-.0267159	.0087131	-3.07	0.002	-.0437987	-.0096331
_Isic2d_80	-.0622698	.0066679	-9.34	0.000	-.0753428	-.0491967
_Isic2d_82	(omitted)					
_Isic2d_87	-.0227129	.0086119	-2.64	0.008	-.0395973	-.0058284
_Isic2d_99	-.0337667	.0068844	-4.90	0.000	-.0472643	-.0202692
_IYEAR_1993	.0030732	.0025789	1.19	0.233	-.001983	.0081295
_IYEAR_1994	.001778	.0025603	0.69	0.487	-.0032416	.0067977
_IYEAR_1995	-.000239	.0025511	-0.09	0.925	-.0052407	.0047628
_IYEAR_1996	-.0020817	.0025485	-0.82	0.414	-.0070782	.0029148
_IYEAR_1997	-.0028346	.0025411	-1.12	0.265	-.0078167	.0021476
_IYEAR_1998	-.0033401	.0025319	-1.32	0.187	-.0083042	.001624
_IYEAR_1999	-.004685	.0025387	-1.85	0.065	-.0096623	.0002924
_IYEAR_2000	-.0036085	.0025229	-1.43	0.153	-.0085549	.0013379
_IYEAR_2001	-.0032916	.0025098	-1.31	0.190	-.0082122	.001629
_IYEAR_2002	-.004757	.0024954	-1.91	0.057	-.0096494	.0001354
_IYEAR_2003	-.0048313	.0025044	-1.93	0.054	-.0097414	.0000787
_IYEAR_2004	-.0027069	.0025064	-1.08	0.280	-.007621	.0022072
_IYEAR_2005	-.0005182	.0025033	-0.21	0.836	-.0054261	.0043898
_IYEAR_2006	.0020849	.0025668	0.81	0.417	-.0029475	.0071172
_cons	-.0011369	.006255	-0.17	0.864	-.0141269	.011853
/sigma	.0249457	.0003351			.0242888	.0256026

**Note:** 1. xi: tobit dv\_sale logtotalcite size mtb bklev rda Capex tenure i.sic2d i.YEAR, ll(0)

```

i.sic2d    _Isic2d_10-99      (naturally coded; _Isic2d_10 omitted)
i.YEAR     _IYEAR_1992-2006   (naturally coded; _IYEAR_1992 omitted)
2. _Isic2d_82 omitted because of collinearity

Tobit regression                               Number of obs =      3834
                                                LR chi2(67) =     1595.69
                                                Prob > chi2 =    0.0000
Log likelihood =  6077.3296                  Pseudo R2 =     -0.1511

3. Obs. summary:  900  left-censored observations at dv_sale<=0
                  2934  uncensored observations
                  0  right-censored observations

```

Table 6.13 and Table 6.14 show the results of the tobit regression that regresses the dividend to total assets and the dividend to sales ratio on the CEO's reputation proxy by the log of total citations plus unity and other controlling factors. The dividend to total assets and dividend to total sales ratio variable are left censored at zero. Other controlling factors include firm size, market-to-book value ratio, book leverage ratio, R&D, capital expenditures, CEO tenure, and also the industry SIC code and year dummies. At 5% level of significant, the tobit estimates of dividend measures show negative, significant effects regarding the CEO's reputation. The results imply that the increase in CEO's reputation decreases the probability that the firm will pay more dividends in relation to the percentage of its total assets and sales. At 5% level of significant, the tobit estimates also reveal negative significant effects regarding the R&D expenditures. These results support the investment hypothesis, which predicts that reputable CEOs tend to use funds to make more R&D investments rather than to payout dividends.

For the controlling variables, the results show that firm size and market-to-book value ratio have a significant positive association with the dividend to total assets and dividend to sales (at the 5% significance level). However, firm R&D expenditures and CEO tenure exhibited a significant negative association with dividend to total assets ratio (at the 5% significance level). The firm book leverage had an insignificant association with both dividend measures. The firm capital expenditures had a significant association with dividend to total assets but had insignificant association with dividend to sales.

The significant negative association between firm R&D and dividend to total assets ratio shows that the firm that invests more in R&D tends to pay lower dividends. It also supports the investment hypothesis whereby reputable CEOs pay fewer dividends because they use the available internal funds to make more R&D expenditures. It implies that reputable CEOs tend to be confident that their R&D investments will turn out to be successful.

**Table 6.15** Logit Regression of Dividend Payout Dummy on Log of CEO's Reputation

<b>dv_pay</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>	<b>[95% Conf. Interval]</b>	
logtotalcite	-.100853	.0396704	-2.54	0.011	-.1786056	-.0231005
size	.7981489	.054348	14.69	0.000	.6916288	.9046691
mtb	.0327686	.0300923	1.09	0.276	-.0262111	.0917483
bklev	.6712164	.3922644	1.71	0.087	-.0976077	1.44004
rda	-13.8556	1.40253	-9.88	0.000	-16.60451	-11.10669
Capex	1.65586	1.404647	1.18	0.238	-1.097198	4.408918
tenure	-.0385189	.0070049	-5.50	0.000	-.0522483	-.0247896
_Isic2d_12	(omitted)					
_Isic2d_13	-14.41227	576.7494	-0.02	0.980	-1144.82	1115.996
_Isic2d_14	(omitted)					
_Isic2d_15	(omitted)					
_Isic2d_16	-15.30395	576.7495	-0.03	0.979	-1145.712	1115.104
_Isic2d_20	-12.75274	576.7494	-0.02	0.982	-1143.161	1117.655
_Isic2d_21	(omitted)					
_Isic2d_23	-13.37555	576.7494	-0.02	0.981	-1143.784	1117.033
_Isic2d_24	(omitted)					
_Isic2d_25	(omitted)					
_Isic2d_26	-12.07781	576.7498	-0.02	0.983	-1142.487	1118.331
_Isic2d_27	(omitted)					
_Isic2d_28	-13.8181	576.7493	-0.02	0.981	-1144.226	1116.59
_Isic2d_29	(omitted)					
_Isic2d_30	-14.52631	576.7494	-0.03	0.980	-1144.934	1115.882
_Isic2d_31	(omitted)					
_Isic2d_33	-12.51715	576.7496	-0.02	0.983	-1142.926	1117.891
_Isic2d_34	(omitted)					

**Table 6.15** (Continued)

<b>dv_pay</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>	<b>[95% Conf. Interval]</b>	
_Isic2d_35	-14.6264	576.7493	-0.03	0.980	-1145.034	1115.782
_Isic2d_36	-14.28664	576.7494	-0.02	0.980	-1144.695	1116.121
_Isic2d_37	-10.79873	576.7502	-0.02	0.985	-1141.208	1119.611
_Isic2d_38	-13.97575	576.7494	-0.02	0.981	-1144.384	1116.432
_Isic2d_39	(omitted)					
_Isic2d_40	(omitted)					
_Isic2d_42	(omitted)					
_Isic2d_44	(omitted)					
_Isic2d_45	-14.77837	576.7496	-0.03	0.980	-1145.187	1115.63
_Isic2d_47	(omitted)					
_Isic2d_48	-14.7562	576.7494	-0.03	0.980	-1145.164	1115.652
_Isic2d_50	(omitted)					
_Isic2d_51	(omitted)					
_Isic2d_52	(omitted)					
_Isic2d_53	-15.12467	576.7494	-0.03	0.979	-1145.533	1115.283
_Isic2d_54	-16.83312	576.7494	-0.03	0.977	-1147.241	1113.575
_Isic2d_55	(omitted)					
_Isic2d_56	-12.99458	576.7495	-0.02	0.982	-1143.403	1117.414
_Isic2d_57	-14.78771	576.7495	-0.03	0.980	-1145.196	1115.62
_Isic2d_58	-14.62774	576.7495	-0.03	0.980	-1145.036	1115.78
_Isic2d_59	-15.35689	576.7494	-0.03	0.979	-1145.765	1115.051
_Isic2d_70	(omitted)					
_Isic2d_72	(omitted)					
_Isic2d_73	-14.56014	576.7494	-0.03	0.980	-1144.968	1115.848
_Isic2d_75	(omitted)					
_Isic2d_78	-17.56295	576.7498	-0.03	0.976	-1147.972	1112.846
_Isic2d_79	-13.99723	576.7497	-0.02	0.981	-1144.406	1116.411
_Isic2d_80	-16.73663	576.7494	-0.03	0.977	-1147.145	1113.671
_Isic2d_82	(omitted)					
_Isic2d_87	-12.64788	576.7503	-0.02	0.983	-1143.058	1117.762
_Isic2d_99	(omitted)					
_IYEAR_1993	-.1535799	.3542376	-0.43	0.665	-.8478728	.5407129
_IYEAR_1994	-.2235151	.3512683	-0.64	0.525	-.9119883	.4649582
_IYEAR_1995	-.7240175	.339107	-2.14	0.033	-1.388655	-.05938
_IYEAR_1996	-1.138012	.3311249	-3.44	0.001	-1.787005	-.4890195
_IYEAR_1997	-1.085716	.3335427	-3.26	0.001	-1.739448	-.4319844
_IYEAR_1998	-1.220942	.3301745	-3.70	0.000	-1.868072	-.5738114
_IYEAR_1999	-1.478739	.3296259	-4.49	0.000	-2.124794	-.8326841

**Table 6.15** (Continued)

<b>dv_pay</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>	<b>[95% Conf. Interval]</b>	
_IYEAR_2000	-1.71567	.3251057	-5.28	0.000	-2.352866	-1.078475
_IYEAR_2001	-1.8179	.3236507	-5.62	0.000	-2.452244	-1.183556
_IYEAR_2002	-1.977673	.3217028	-6.15	0.000	-2.608199	-1.347147
_IYEAR_2003	-1.926911	.3231965	-5.96	0.000	-2.560365	-1.293458
_IYEAR_2004	-1.71402	.3259411	-5.26	0.000	-2.352853	-1.075187
_IYEAR_2005	-1.610045	.3272806	-4.92	0.000	-2.251503	-.9685868
_IYEAR_2006	-1.56288	.3343215	-4.67	0.000	-2.218138	-.907622
_cons	10.57185	576.7495	0.02	0.985	-1119.836	1140.98

**Note:** 1. xtset gvkey1

```

. xi: logit dv_pay logtotalcite size mtb bklev rda
Capex tenure i.sic2d i.YEAR

panel variable: gvkey1 (unbalanced)

i.sic2d    _Isic2d_10-99      (naturally coded; _Isic2d_10 omitted)
i.YEAR     _IYEAR_1992-2006   (naturally coded; _IYEAR_1992 omitted)

2. _Isic2d_12 != 0 predicts success perfectly
   _Isic2d_12 dropped and 16 obs not used

3. _Isic2d_14 != 0 predicts success perfectly
   _Isic2d_14 dropped and 15 obs not used

4. _Isic2d_15 != 0 predicts success perfectly
   _Isic2d_15 dropped and 50 obs not used

5. _Isic2d_21 != 0 predicts success perfectly
   _Isic2d_21 dropped and 30 obs not used

6. _Isic2d_24 != 0 predicts success perfectly
   _Isic2d_24 dropped and 38 obs not used

7. _Isic2d_25 != 0 predicts success perfectly
   _Isic2d_25 dropped and 30 obs not used

8. _Isic2d_27 != 0 predicts success perfectly
   _Isic2d_27 dropped and 89 obs not used

```

- Note:** 9. `_Isic2d_29 != 0` predicts success perfectly  
`_Isic2d_29` dropped and 88 obs not used
10. `_Isic2d_31 != 0` predicts failure perfectly  
`_Isic2d_31` dropped and 6 obs not used
11. `_Isic2d_34 != 0` predicts success perfectly  
`_Isic2d_34` dropped and 74 obs not used
12. `_Isic2d_39 != 0` predicts success perfectly  
`_Isic2d_39` dropped and 30 obs not used
13. `_Isic2d_40 != 0` predicts success perfectly  
`_Isic2d_40` dropped and 58 obs not used
14. `_Isic2d_42 != 0` predicts success perfectly  
`_Isic2d_42` dropped and 8 obs not used
15. `_Isic2d_44 != 0` predicts success perfectly  
`_Isic2d_44` dropped and 15 obs not used
16. `_Isic2d_47 != 0` predicts success perfectly  
`_Isic2d_47` dropped and 24 obs not used
17. `_Isic2d_50 != 0` predicts success perfectly  
`_Isic2d_50` dropped and 30 obs not used
18. `_Isic2d_51 != 0` predicts success perfectly  
`_Isic2d_51` dropped and 39 obs not used
19. `_Isic2d_52 != 0` predicts success perfectly  
`_Isic2d_52` dropped and 45 obs not used
20. `_Isic2d_55 != 0` predicts failure perfectly  
`_Isic2d_55` dropped and 27 obs not used
21. `_Isic2d_70 != 0` predicts success perfectly  
`_Isic2d_70` dropped and 8 obs not used
22. `_Isic2d_72 != 0` predicts success perfectly  
`_Isic2d_72` dropped and 14 obs not used

**Note:** 23. `_Isic2d_75 != 0` predicts success perfectly  
`_Isic2d_75` dropped and 15 obs not used

24. `_Isic2d_99 != 0` predicts success perfectly  
`_Isic2d_99` dropped and 30 obs not used

25. `_Isic2d_82` omitted because of collinearity

```
Iteration 0: log likelihood = -1822.3192
Iteration 1: log likelihood = -1315.5395
Iteration 2: log likelihood = -1270.3078
Iteration 3: log likelihood = -1267.2974
Iteration 4: log likelihood = -1267.0255
Iteration 5: log likelihood = -1266.9909
Iteration 6: log likelihood = -1266.9848
Iteration 7: log likelihood = -1266.9834
Iteration 8: log likelihood = -1266.9831
Iteration 9: log likelihood = -1266.983
Iteration 10: log likelihood = -1266.983
```

Logistic regression	Number of obs	=	3055
	LR chi2(46)	=	1110.67
	Prob > chi2	=	0.0000
Log likelihood = -1266.983	Pseudo R2	=	0.3047

Table 6.15 shows the results of the logit regression, which regresses the dividend payout dummy upon the CEO's reputation proxy by the log of total citations and other controlling factors. The dividend payout dummy is a Boolean response variable. All the observations on the dividend payout dummy were either 0 (firm did not pay dividends) or 1 (firm did pay dividends). Other controlling factors included firm size, market-to-book value ratio, book leverage ratio, R&D, capital expenditures, CEO tenure, and also the industry SIC code and year dummies. Similar to the other models, this logit estimates of the dividend dummy showed negative, significant effects regarding the CEO's reputation. The results imply that the CEO's reputation decreases the likelihood that the firm will pay dividends. The estimates also show significant negative association between the propensity to payout dividend and the firm's R&D expenditures. These results also support the investment hypothesis, which predicts that reputable CEOs tend to use funds to make more R&D investments rather than to payout dividends.

**Table 6.16** Linear Regression of Dividend to Total Assets on Log of CEO's Reputation

	Robust					
dv_ta	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
logtotalcite	-.0011354	.0004969	-2.28	0.023	-.0021131	-.0001577
size	.0028114	.0008343	3.37	0.001	.00117	.0044528
mtb	.0039668	.0014118	2.81	0.005	.0011891	.0067446
bklev	.0060979	.0090763	0.67	0.502	-.0117597	.0239555
rda	-.0662884	.0267699	-2.48	0.014	-.1189581	-.0136187
Capex	-.0381494	.0129375	-2.95	0.003	-.0636038	-.0126949
tenure	-.0001881	.0000918	-2.05	0.041	-.0003688	-7.45e-06
_cons	-.0121281	.0071343	-1.70	0.090	-.0261648	.0019087

**Note:** . xi: reg dv\_ta logtotalcite size mtb bklev rda Capex tenure, robust cluster(gvkey)

Linear regression	Number of obs =	3834
	F( 7, 316) =	7.74
	Prob > F =	0.0000
	R-squared =	0.0942
	Root MSE =	.02103

**Table 6.17** Linear Regression of Dividend to Sales on Log of CEO's Reputation

		Robust				
dv_sale	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
logtotalcite	-.000989	.0005621	-1.76	0.079	-.002095	.000117
size	.0043546	.0011268	3.86	0.000	.0021377	.0065716
mtb	.003285	.0010289	3.19	0.002	.0012606	.0053094
bklev	.0173872	.0104368	1.67	0.097	-.0031471	.0379216
rda	-.031996	.025331	-1.26	0.207	-.0818346	.0178427
Capex	-.0441906	.0206415	-2.14	0.033	-.0848027	-.0035784
tenure	-.0002075	.000094	-2.21	0.028	-.0003926	-.0000225
_cons	-.0259689	.0096625	-2.69	0.008	-.04498	-.0069579

**Note:** . xi: reg dv\_sale logtotalcite size mtb bklev rda Capex tenure, robust cluster(gvkey)

Linear regression	Number of obs =	3834
	F( 7, 316) =	9.67
	Prob > F =	0.0000
	R-squared =	0.0838
	Root MSE =	.02435

Table 6.16 and Table 6.17 show the results of the linear regression, which regress the dividend measures (dividend to total assets and dividend to sales on the CEO's reputation and other controlling factors. Since the data set has a cluster structure and observations in the same clusters tend to have similar characteristics and are more likely correlated with each other, these regression results are based on robust standard error estimates. The observations are clustered at the firm level in order to eliminate intra-firm correlations and therefore correct for heteroskedasticity in the error terms.

The linear regression model estimates of dividend to total assets shows negative significant effects regarding the CEO's reputation, and also negative significant effects regarding the R&D expenditures. The results imply that the firm pays lower dividend when its CEO's reputation is high, and when the firm has higher R&D expenditures. These results support the investment hypothesis, which predicts that reputable CEOs tend to use funds to make more investments in R&D rather than to pay out dividends.

## **CHAPTER 7**

### **CONCLUSION**

This research explores the relationship between CEO reputation and firm dividend payouts. The existing hypotheses suggest that firms that have CEO with higher reputation may have more, or less, or no relevancy to dividend payout.

One argument states that reputable CEO may pay more dividends because they are afraid to make risky investment that could ruin their reputation if the investment turns to be a failure. However, the counter argument states that reputable CEO may pay lower dividends because they are confident that their investments will be successful and so they would like to make more investment.

Using press coverage (media counts) to proxy for CEO reputation, this study conducts empirical tests and finds that firms with reputable CEOs tend to make more investment in R&D and tend to pay lower dividends. The logistic regression shows that firms with more reputable CEOs are less likely to payout dividends.

Although the press coverage may refer to CEO's name in either positive or negative way, Francis et al. (2008) ensure that the number of citations is not a reflection of CEO infamy as opposed to reputation by conducting three validation checks. First, when the articles are randomly selected, the tone is favorable toward the CEO 95% of the time. Second, the number of press coverage is correlated with a proxy for reputation used by Milbourn (2003) and Rajgopal et al. (2006) who used the numbers of CEOs appointed from outside the firm as a proxy for reputation. Third, the number of citations is highly correlated with explicit recognition of the CEO by the "top CEO" lists compiled by various sources. The results of these validity checks justify the use of press coverage or total citations as a measure of the CEO reputation. According to these results, it is reasonable to use the press coverage as a proxy for CEO reputation.

The results remain robust and significant at 5% level for both tobit regression and logistic regression, and also after controlling for other firm's policy variables,

CEO variables, and firm's characteristic variables. Because the total citations are not normally distributed and are relatively in large scale compared to the dividend measurements, the last section reports the regression analysis using the log of total citations plus unity instead of the total citations. In both cases, the regressions yield the same results. Our results have important implications because they show that a manager-specific characteristic has a significant influence on corporate dividend payouts.

## BIBLIOGRAPHY

- Allen, Franklin and Michaely, Roni. 2002. **Payout Policy**. The Working Paper Series is Made Possible by a Generous Grant from the Alfred P. Sloan Foundation. Financial Institutions Center. Retrieved July 20, 2011 from <http://fic.wharton.upenn.edu/fic/papers/01/0121.pdf>
- Allen, Franklin; Bernardo, Antonio and Welch, Ivo. 2000. A Theory of Dividends Based on Tax Clientele. **The Journal of Finance**. 55 (December): 2499-2536.
- Ambarish, Ramasastri; Kose, John and Joseph, Williams. 1987. Efficient Signaling with Dividends and Investments. **The Journal of Finance**. 42 (June): 321-343.
- Amihud, Yakov and Baruch Lev. 1981. Risk Reduction as a Managerial Motive for Conglomerate Mergers. **The Bell Journal of Economics**. 12 (2): 605-617.
- Baker, Malcolm and Jeffrey, Wurgler. 2004a. A Catering Theory of Dividends. **The Journal of Finance**. 59 (June): 1125-1165.
- Baker, Malcolm and Jeffrey, Wurgler. 2004b. Appearing and Disappearing Dividends: The Link to Catering Incentives. **Journal of Financial Economics**. 73 (August): 271-288.
- Barclay, M.; Smith, C. and Watts, R. 1995. The Determinants of Corporate Leverage and Dividend Policies. **Journal of Applied Corporate Finance**. 7 (Winter): 4-19.
- Baum, Christopher F. 2006. **An Introduction to Modern Econometrics Using STATA**. College Station, Tex.: Stata Press.
- Bertrand, Marianne and Schoar, Antoinette. 2003. Managing with Style: The Effect of Managers on Firm Policies. **The Quarterly Journal of Economics**. 118 (4): 1169-1208.
- Bernheim, Douglas. 1991. Tax Policy and the Dividend Puzzle. **Rand Journal of Economics**. 22 (Winter): 455-476.
- Bhattacharya, Sudipto. 1979. Imperfect Information, Dividend Policy, and 'The Bird In The Hand' Fallacy. **Bell Journal of Economics**. 10 (1): 259-270.

- Brickley, James A.; Coles, Jeffrey L. and Linck, James S. 1999. What Happens to CEOs After They Retire? New Evidence on Career Concerns, Horizon Problems, and CEO Incentives. **Journal of Financial Economics.** 52 (June): 341-377.
- Brooks, Chris. 2008. **Introductory Econometrics for Finance.** 2nd ed. New York: Cambridge University Press.
- Camerer, C. and Lovallo, D. 1999. Overconfidence and Excess Entry: An Experimental Approach. **American Economic Review.** 89 (March): 306-318.
- Chatterjee, C. and Hambrick, D. 2007. It's all About Me: Narcissistic Chief Executive Officers and Their Effects on Company Strategy and Performance. **Administrative Science Quarterly.** 52 (September): 351-386.
- Chevalier, Judith and Ellison, Glenn. 1999. Are Some Mutual Fund Managers Better Than Others? Cross-Sectional Patterns in Behavior and Performance. **The Journal of Finance.** 54 (June): 875-899.
- Denis, David J. and Osobov, Igor V. 2005. **Disappearing Dividends, Catering Incentives and Agency Costs: International Evidence.** Retrieved August 13, 2011 from <http://ssrn.com/abstract=778024> or <http://dx.doi.org/10.2139/ssrn.778024>
- DiMaggio, P. and Powell,W. 1983. The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. **American Sociological Review.** 48 (April): 147-160.
- Easterbrook, Frank H. 1984. Two Agency-Cost Explanations of Dividends. **American Economic Review.** 74 (September): 650-659.
- Fama, E. and French, K. 2001. Disappearing Dividends: Changing Firm Characteristics or Lower Propensity to Pay?. **Journal of Financial Economics.** 60 (April): 3-43.
- Feldstein, S. and Green, J. 1983. Why do Companies Pay Dividends?. **The American Economic Review.** 73 (1): 17-30.
- Ferris, S.; Jagannathan, M. and Pritchard, A. C. 2003. Too Busy to Mind the Business?. Monitoring by Directors with Multiple Appointments. **The Journal of Finance.** 58 (June): 1087-1112.

- Ferris, S. P.; Narayanan Jayaraman, and Sanjiv Sabherwal. 2009. Catering Effects in Corporate Dividend Policy: The International Evidence. **Journal of Banking and Finance.** 33 (9): 1730-1738.
- Francis, J.; Huang, Allen H.; Rajgopal, S. and Zang, Amy Y. 2008. CEO Reputation and Earnings Quality. **Contemporary Accounting Research.** 25 (Spring): 109-147.
- Gaines-Ross, L. 2003. **CEO Capital: A Guide to Building CEO Reputation and Company success.** Hobokin, N.J.: Wiley & Sons.
- Gao, L. and Sudarsanam, P. 2005. **Executive Compensation, Hubris, Corporate Governance: Impact on Managerial Risk Taking and Value Creation in UK High-Tech and Low-Tech Acquisitions.** Retrieved August 13,2011 from [http://www.efmaefm.org/efmsympo2005/accepted\\_papers/33-Sudi\\_Sudarsanam\\_compensation\\_paper.pdf](http://www.efmaefm.org/efmsympo2005/accepted_papers/33-Sudi_Sudarsanam_compensation_paper.pdf)
- Gilson, S. C. 1989. Management Turnover and Financial Distress. **Journal of Financial Economics.** 25 (December): 241-262.
- Gilson, S. C. 1990. Bankruptcy, Boards, Banks, and Blockholders: Evidence on Changes in Corporate Ownership and Control When Firms Default. **Journal of Financial Economics.** 27 (October): 355-387.
- Graham, John R. and Campbell R. Harvey. 2001. The Theory and Practice of Corporate Finance: Evidence from the Field. **Journal of Financial Economics.** 60 (May): 187-243.
- Grossman, Sanford J. and Hart, Oliver D. 1980. Takeover Bids, the Free-Rider Problem, and the Theory of the Corporation. **Bell Journal of Economics.** 11 (Spring): 42-64.
- Grullon, Gustavo and Michaely, Roni. 2002. Dividends, Share Repurchases and the Substitution Hypothesis. **The Journal of Finance.** 62, 4 (August): 1649-1684.
- Gustavo Grullon, Roni Michaely, and Bhaskaran Swaminathan. 2002. Are Dividend Changes a Sign of Firm Maturity?. **The Journal of Business.** 75 (3): 387-424.
- Hannan, M. and Freeman, J. 1977. The Population Ecology of Organizations. **American Journal of Sociology.** 82 (March): 929-964.

- Harris, M. and Raviv, A. 1991. The Theory of Capital Structure. **The Journal of Finance.** 46 (March): 297-355.
- Hirshleifer, D. and Thakor, A. 1992. Managerial Conservatism, Project Choice and Debt. **The Review of Financial Studies.** 5 (3): 437-470.
- Hribar, P. and Yang, H. 2007. **Does CEO Overconfidence Affect Management Forecasting and Subsequent Earnings Management?.** Working Paper. Tippie College of Business, University of Iowa.
- Hoberg, G. and Prabhala, N. 2005. **Disappearing Dividends: The Importance of Idiosyncratic Risk and the Irrelevance of Catering.** Working Paper. University of Maryland.
- Holder, M.; Langrehr, F. and Hexter, L. 1998. Dividend Policy Determinants: An Investigation of the Influence of Stakeholder Theory. **Financial Management.** 27 (Autumn): 73-82.
- Holmstrom, B. and Costa, J. R. 1986. Managerial Incentives and Capital Management. **The Quarterly Journal of Economics.** 101 (November): 835-860.
- Hu, A. and Kumar, P. 2004. Managerial Entrenchment and Payout Policy. **Journal of Financial and Quantitative Analysis.** 39 (December): 759-790.
- Jensen, Michael C. 1986. Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. **American Economic Review.** 76 (2): 323-329.
- Jensen, Michael C. and Meckling, William H. 1976. Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. **Journal of Financial Economics.** 3 (October): 305-360.
- Jensen, Gerald R.; Donald P. Solberg and Thomas S. Zorn. 1992. Simultaneous Determination of Insider Ownership, Debt, and Dividend Policies. **Journal of Financial and Quantitative Analysis.** 27 (June): 247-263.
- Jin, L. and Kothari, S. P. 2006. **Effects of Personal Taxes on Managers' Decision to Sell Unrestricted Equity.** Working Paper. Harvard University and MIT.
- John, Kose and Williams, Joseph. 1985. Dividends, Dilution, and Taxes: a Signaling Equilibrium. **Journal of Finance.** 40 (September): 1053-1070.
- Kahneman, D. and Lovallo, D. 1993. Timid Choices and Bold Forecasts: a Cognitive Perspective on Risk Taking. **Management Science.** 39 (January): 17-31.

- Kaplan, S. and Reihus, D. 1990. Outside Directorships and Corporate Performance. **Journal of Financial Economics.** 27 (2): 389-410.
- Kutner, Michael H.; Nachtsheim, Christopher J.; Neter, John and William, Li. 2005. **Applied Linear Statistical Models.** 5th ed. Boston: McGraw-Hill Irwin.
- Li, W. and Lie, E. 2006. Dividend Changes and Catering Incentives. **Journal of Financial Economics.** 80 (May): 293-308.
- Liu, Yixin, Zhang, Yilei and Pornsit Jiraporn. 2011. **CEO Reputation and Corporate Risk Taking.** Working Paper. Pennsylvania State University.
- Malmendier, U. and Tate, G. 2005a. CEO Overconfidence and Corporate Investment. **Journal of Finance.** 60 (December): 2661-2700.
- Malmendier, U. and Tate, G. 2005b. **Who Makes Acquisitions?.** CEO Overconfidence and the Market's Reaction. Working Paper. Stanford University and University of Pennsylvania.
- March, J. and Shapira, Z. 1987. Managerial Perspectives on Risk and Risk Taking. **Management Science.** 33 (November): 1404-1418.
- Milbourn, T. 2003. CEO Reputation and Stock-Based Compensation. **Journal of Financial Economics.** 68 (May): 233-263.
- Miller, Merton and Modigliani, Franco. 1961. Dividend Policy, Growth and the Valuation of Shares. **Journal of Business.** 34 (October): 411-433.
- Miller, Merton and Rock, Kevin. 1985. Dividend Policy Under Asymmetric Information. **Journal of Finance.** 40 (September): 1031-1051.
- Myers, Stewart C. 1977. Determinants of Corporate Borrowing. **Journal of Financial Economics.** 5 (Noverber): 147-175.
- Nosic, A. and Weber, M. 2010. How Risky do I Invest: The Role of Risk Attitudes, Risk Perceptions, and Overconfidence. **Decision Analysis.** 7 (September): 282-301.
- Polk, C. and Sapienza, P. 2004. **The Real Effects of Investor Sentiment.** NBER Working Paper 10563.
- Rajgopal, Shivaram; Shevlin, Terry and Zamora, Valentina. 2006. CEO's Outside Employment Opportunities and Lack of Relative Performance Evaluation. **Journal of Finance.** 61 (4): 1813-1844.

- Redding, L. S. 1997. Firm Size and Dividend Payouts. **Journal of Financial Intermediation.** 6 (July): 224-248.
- Richardson, Scott A.; Tuna, A Irem and Wysocki, Peter D. 2003. **Accounting for Taste: Board Member Preferences and Corporate Policy.** MIT SloanWorking paper No. 4307-03.
- Ross, S. 1977. The Determination of Financial Structure: The Incentive Signaling Approach. **Bell Journal of Economics.** 8 (Spring): 23-40.
- Rozeff, M. 1982. Growth, Beta, and Agency Costs as Determinants of Dividend Payout ratios. **Journal of Financial Research.** 5 (3): 249-259.
- Shane, S. and Stuart, T. 2002. Organizational Endowments and The Performance of University Start-Ups. **Management Science.** 48 (January): 154-170.
- Shefrin, M. and Statman, M. 1984. Explaining Investor Preference for Cash Dividends. **Journal of Financial Economics.** 13 (June): 253-282.
- Sitkin, S. and Pablo, A. 1992. Re-conceptualizing the Determinants of Risk Behavior. **Academy of Management Review.** 17 (January): 9-38.
- Tsuji, Chikashi. 2010. A Test of the Catering Theory of Dividends: The Case of the Japanese Electric Appliances Industry. **Journal of Management Research.** 2 (2): 2-16.
- Twite, G. 2001. Capital Structure Choices and Taxes: Evidence from the Australian Dividend Imputation Tax System. **International Review of Finance.** 2 (December): 217-234.
- Whisenant, S.; Sankaraguruswamy, S. and Raghunandan, K. 2003. Evidence on the Joint Determination of Audit and Non-Audit Fees. **Journal of Accounting Research.** 41 (September): 721-744.
- Williams, Joseph. 1988. Efficient Signaling with Dividends, Investment, and Stock Repurchases. **Journal of Finance.** 43 (July): 737-747.

## **APPENDIX**

## THE STATA CODE

The STATA code

Table 5

```
oneway totalcite dv_pay, tabulate
```

table 6

```
ttest totalcite, by(dv_pay) unequal Welch
```

table 7

```
. xi: tobit dv_ta totalcite size mtb bklev rda Capex tenure i.sic2d i.YEAR, ll(0)
```

Table 8

```
. xi: tobit dv_sale totalcite size mtb bklev rda Capex tenure i.sic2d i.YEAR, ll(0)
```

Table 9

```
xtset gvkey1
```

```
. xi: logit dv_pay totalcite size mtb bklev rda Capex tenure i.sic2d i.YEAR
```

Table 10

```
mfx compute
```

Table 11

```
. xtlogit dv_pay totalcite size mtb bklev rda Capex tenure
```

Table 12

```
mfx compute
```

Table 13

```
. xtlogit dv_pay totalcite size mtb bklev rda Capex tenure, i(gvkey1) fe
```

```
mfx compute **cannot
```

Table 14

```
. xi: reg dv_ta totalcite size mtb bklev rda Capex tenure, robust cluster(gvkey)
```

Table 15

```
. xi: reg dv_sale totalcite size mtb bklev rda Capex tenure, robust cluster(gvkey)
```

Table 16

```
vif
```

Find the marginal effect at each quantile and median

```
xtset gvkey1
. xi: logit dv_pay totalcite size mtb bklev rda Capex tenure i.sic2d i.YEAR
summarize totalcite, detail
```

Replace the following “0” with the number of total citations at percentile 25, percentile 50, percentile 75, and maximum (quantile 1, 2, 3, and 4)

```
mfx compute, at(totalcite = 0)
```

Find the marginal effect at each quantile and median

```
. xtlogit dv_pay totalcite size mtb bklev rda Capex tenure
summarize totalcite, detail
```

Replace the following “0” with the number of total citations at percentile 25, percentile 50, percentile 75, and maximum (quantile 1, 2, 3, and 4)

```
mfx compute, at(totalcite = 0)
```

For the logtotalcite

Table 17

```
. xi: tobit dv_ta logtotalcite size mtb bklev rda Capex tenure i.sic2d i.YEAR, ll(0)
```

Table 18

```
. xi: tobit dv_sale logtotalcite size mtb bklev rda Capex tenure i.sic2d i.YEAR, ll(0)
```

Table 19

```
xtset gvkey1
```

```
. xi: logit dv_pay logtotalcite size mtb bklev rda Capex tenure i.sic2d i.YEAR
```

Table 20

```
. xi: reg dv_ta logtotalcite size mtb bklev rda Capex tenure, robust cluster(gvkey)
```

Table 21

```
. xi: reg dv_sale logtotalcite size mtb bklev rda Capex tenure, robust cluster(gvkey)
```

## **BIOGRAPHY**

<b>NAME</b>	Danai Likitratcharoen
<b>ACADEMIC BACKGROUND</b>	Bachelor Degree of Engineering, Major Civil Engineer, Chiangmai University, Thailand Master of Technology Management, University of New South Wales, Australia
<b>PRESENT POSITION</b>	AVP Market Risk Department, Krungthai Bank
<b>EXPERIENCES</b>	Trader, Krungthai Bank Market Risk Officer, Siam Commercial Bank