

CORPORATE SOCIAL RESPONSIBILITY AND COST OF EQUITY: EVIDENCE FROM CORPORATE TAX DISPUTES

Mingjun Zhou
DePaul University

Key Words: cost of equity, tax disputes, corporate social responsibility

JEL Classification(s): H25, G30

Abstract

This study examines the relation between social concerns on firms' tax positions and their cost of equity. Corporate social performance can influence capital market processes but little empirical evidence has been presented yet in terms of the effects of tax disputes on shareholder preference. I contribute by showing that tax concerns expressed by a social monitoring index are associated with a higher implied cost of equity capital. In other words, firms may lower their cost of equity capital and contribute to the community by acting as non-aggressive taxpayers.

INTRODUCTION

Can a firm be socially responsible while making profits? The advocate in the neo-classical economic school seems to present a clear choice and dictates that the only legitimate purpose of business was to make profit. Friedman (1962, 1970) wrote "there is one and only one social responsibility of business – to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game" However,

the "rules of the game" may not always be clear-cut. How would stakeholders react, and what would be the capital-market reactions when corporations take aggressive interpretations of the tax code?

The traditional view by Friedman seems to encourage corporations to be aggressive in minimizing tax payments to the community and government so long as it is "within the rules of the game." Nevertheless, the nature of the tax code tends to be complex and makes the interpretation of the rules a delicate and sensitive matter. While firm management owes the fiduciary duty to maximize shareholder returns by minimizing tax owed to the government, societal controversy may arise from abusive corporate tax avoidance and evasion. To this end, I investigate how tax disputes between the firms and the government may affect investor preference and firms' cost of equity capital.

The issue is more pertinent now than ever with the new storm of controversy surrounding the amount of tax risk and tax aggressive behaviors that firms exhibit in society, and with the political rhetoric for corporate citizens to pay their fair share of taxes amid economic recession and government deficit. For instance, a leading pension fund, the employees' pension plan of the American Federation of State, County and Municipal Employees (AFSCME), sought to place the matter of tax risks and tax disputes on shareholders' proxy votes to mitigate risk exposure facing prudent shareholders. In addition, it proposes the following sample template for shareholders of other corporations to adopt on their proposals for proxy votes:

"Resolved, that shareholders of [Company name] request that [Company's] board of directors annually assess the risks created by the actions [Company] takes to avoid or minimize U.S. federal, state, and local taxes and provide a report to shareholders on the assessment, at reasonable cost and omitting proprietary information." (Schlank 2011)

The shareholder proposal initiated by AFSCME sets an important tone for the investing public on the risks of aggressive

tax behaviors and the importance of corporate social responsibility to pay its fair share of taxes. For example, Home Depot was in the spotlight due to the large size of the company's tax reserves (\$659 million) of uncertain tax positions reported on Home Depot's 2010 10-K. As a result, AFSME filed a shareholder proposal for Home Depot's annual proxy votes, arguing "...companies that rely on tax avoidance practices could be exposed to greater risk and decreasing earnings." Other large corporations cited in the shareholder proposal include Amazon.com Lazard Ltd., Pfizer Inc. and TJX Co. These high-profile proposals illustrate shareholders' concern over a corporation's tax aggressiveness and the potential tax audits and legal disputes that will negatively impact shareholder welfare.

First, the negative effects could be due to the increased risk of reduced cash flows out of fines and penalties upon settlement of tax disputes. Second, and perhaps more importantly, the link between shareholder welfare and tax disputes may be based on reputational effects: the goodwill of public companies may suffer when in the media spot- light for litigations with federal, state and local authorities. For example, the mission statement of General Electric's tax department emphasizes that corporate tax strategies should not harm the company's reputation, or be identified by the business press for its aggressiveness, casting an image of "poor corporate citizen." This reputational concern is not limited to negative press. Firms also want to emphasize their social responsibility in paying the lion's share of federal income tax. In the 2004 Wal-Mart annual report, CEO Lee Scott reported to its shareholders:

"Wal-Mart paid \$4 billion in U.S. federal income taxes in fiscal year 2004. To borrow a page from my friend Warren Buffet's annual report to the shareholders of Berkshire Hathaway, this means that if 446 other taxpayers paid the same amount as Wal-Mart, no other business or individual in the United States would have had to pay federal taxes last year."

In this study, I use the ratings in a major social monitoring index - the KLD Corporate Social Ratings Monitor - and find that firms on the index rated as having concerns about their tax disputes in the community are associated with a higher implied cost of equity capital. The implied cost of equity is a recent measure developed in the accounting and finance literature that differs from the contemporaneous or *ex-post* stock return measure. This measure of cost of equity captures the ex-ante valuation of shareholders on a firm's operations when determining their long-term expected returns. The statistical analyses suggest that ratings of social concerns on corporate tax disputes are associated with an increase in the corporation's cost of equity. In other words, public companies can raise more capital less expensively if they are not perceived as an aggressive player in the tax field. In the remainder of the paper, I will first discuss the relevant literature and then follow up with my empirical methods and results.

LITERATURE REVIEW AND HYPOTHESIS

Corporate Social Responsibility and Capital Market Performance

Prior research on the relationship between corporate social ratings and capital market performance has not been conclusive. Vance (1975) surveyed the social responsibility ratings from 86 corporate staffers and 300 graduate business students. The result suggests that if investors buy the company common stock ranked in the upper half of the socially responsible ratings, they would lose 43.9% of their investment in 1974. This is in contrast with the view by Moskowitz (1972) that a socially responsible company has the stewardship and talent to produce greater financial profits. Alexander and Buchholz (1978) also use a social rating by corporate executives and business students but find no significant relationship between social ratings and stock performance as measured by the Capital Asset Pricing Model. They did propose a possible explanation on the insignificance of this relationship: the

stock market may be efficient as described by Fama (1970) and the measurement of stock return on an *ex-post* basis will likely detect no difference as the market has already adjusted their expectations. Therefore, it is important either to use an event-study approach studying stock price fluctuations during a short event window, or to measure investors' *ex-ante* expected returns as measured by firms' implied cost of equity capital.

Recent research argues that firms with good social responsibility build a good reputation among stakeholders (e.g. Branco and Rodriguez). Barnett (2006) defines corporate social responsibility as "a discretionary allocation of corporate resources toward improving social welfare that serves as a means of enhancing relationships with key stakeholders." From the stakeholder perspective advocated by Barnett (2006), firms engage in social responsibility issues when such actions may lower operating cost and increase financial gain (e.g. increased employee satisfaction leads to less union issues and helps with a firm's bottom line). From this theory perspective, an enhanced relationship should reduce the uncertainty facing the corporation and bring down the required risk premium asked by investors.

Social performance incentive for a public company can also include considerations of its reputation among the key stakeholders, such as regulators, customers and shareholders. Earlier research has documented that firms bear the reputational and political costs on the capital markets after being convicted of criminal fraud (Karpoff and Lott 1993): allegations or investigations of corporate fraud were linked to an average decrease of 1.34 percent, or \$60.8 million, in the values of the common stocks of affected companies.

Most recent literature (Cox and Wicks 2011) has examined what types of investors care more (or less) about corporate social responsibility. They find that corporate responsibility is a more important factor in share selection for dedicated long-term investors compared with short-term "transient" investors such as open-ended mutual funds. This paper attempts to contribute by focusing on the tax perspectives in the overall corporate social

performance picture. In this direction, I use a long-term measure, the *implied cost of equity capital* (discussed more in detail in the Methods and Results Section) to study the link between tax-dispute concerns and investor preference.

Ethical and Social Considerations on Corporate Tax Disputes

The justification for corporate tax avoidance can be understood in the perspective of utilitarian ethics. If we believe that the private sector makes more efficient use of resources than the public sector, the ethical thing to do for the corporate citizens would be to minimize their taxes owed to the government and let the shareholders make their own decisions about charitable contributions. John D. Rockefeller, for example, once said, "gain all you can, save all you can, and give all you can". The management of public companies has a fiduciary duty to maximize shareholder returns by not dissipating corporate to unreasonable tax levies by the government.¹ From this perspective, virtuous corporate social behavior and tax compliance does not necessarily require firms to accept the opinion of tax administrators in an uncritical manner. It may be up to the courts to settle the disputes between the corporate taxpayer and the government.

However, social concerns and negative press coverage may arise from these litigations. There may be a reputational penalty when public companies are put on the spot for being perceived as not paying their fair share and aggressively minimize their taxes by disputing their tax obligations. Investors also may not like the uncertainty inherent in a litigation process with the government. In general, the social process in the tax field involves more than taxpayer rights and the efficient use of resources in the private sector. Firms may adopt a continuum of strategies in their interactions with the government. The most conservative will follow the directives of the tax administrator without a question

¹ I am deeply in debt to the reviewer on these philosophical insights.

and the most aggressive will challenge the authority at every possible opportunity.

Hypothesis

As discussed earlier, the social process between the government and corporations on the issue of taxation is an intricate one. While it may be easy to define the distinction between full compliance with tax law and illegal non-compliance (usually described as tax evasion), activities that falls in between the two extremes may become subjects of contestation. The boundary between acceptable and unacceptable tax practices are not clear-cut and corporate managers may use their discretions in taking corporate tax positions. To ensure the functioning of tax collection, a substantial part of the system may need to be socially constructed. Braithwaite (2009) describes the relationship between the regulator (the tax administrator) and the regulatee (the corporate taxpayer) as a 'dance' in which a consensus is essential to the operation of a tax system. For example, in 2010 the Internal Revenue Service first announced proposed regulation to require corporations to disclose their uncertain tax positions and the maximum amount of potential tax liability for each position in their tax returns. This move by the IRS, however, was widely criticized by taxpayers and accountants as a departure from the established IRS practice of "policy of restraint." Amid the strong backlash, the IRS did take a step back and lowered the disclosure requirement.

On the other side, the dance can be out of step when a corporate taxpayer does not collaborate with the tax administrator toward a mutual resolution but becomes confrontational by challenging an existing regulation. Any open dispute with the government is an underlying risk factor that investors will have to take into account. Often, litigation is expensive and time-consuming. Negative press coverage can arise from the cases in litigation. For instance, anecdotal evidence from U.K. suggests that larger companies are increasingly concerned with reputational issues and the possibility of protests by activists (Cape and

Dayananda 2012). Any challenge on the regulatory regime may also be countered with high-pressure tactics from the government to ensure that other taxpayers do not follow the same practice. From this perspective, corporate social responsibility in the tax field may be constructed as a social process whose purpose is to establish a social protocol to minimize stakeholder conflicts so that the tax system can function in an efficient and effective manner.

To measure the construct of corporate social responsibility in the field of tax aggressiveness, the social responsibility measures in the Kinder, Lydenberg and Domini's (KLD) Stats database are utilized to measure whether firms have rating of concerns over their tax disputes with the authorities. The research question is then whether firms rated as having concerns over their tax practices are considered more risky and less appealing to long-term investors, and thus they need to pay higher cost of equity capital. The disciples of Friedman (1962, 1970) would argue that aggressive positions in reducing tax liability should be the norm and attractive more investors in a free capital market. On the other side, as prior analyses point out, open tax disputes will bring uncertainties and incur reputational and political penalties for the corporation. Thus, the research hypothesis is stated in its null form:

Hypothesis (in the null form): Social concerns over a firms' tax dispute will not affect its cost of equity

EMPIRICAL METHODS AND RESULTS

Implied Cost of Capital

Various approaches exist in the accounting and finance literature on the measurement of cost of capital or investors' required returns on their equity investments. Prior work mostly employs *ex-post* realized stock returns as a measure of investors' required returns, but this measure is not theoretically sound and empirically satisfying in many aspects. In theory, realized returns observed *ex-post* tend to reflect the expectations of minority investors under heterogeneous expectations and short-selling constraints (Miller, 1977). Empirically, Fama and French (1997)

conclude that cost-of-capital measures based on realized returns are imprecise and noisy at best. Elton (1999, p.1199) also argues that “realized returns are very poor measures of expected returns.”

As a remedy, recent research in accounting and finance has proposed different methods to estimate investors’ ex ante required return or *implied cost of equity*. Major estimation methods for this *ex-ante* measure of cost of capital have been developed by Gebhardt, Lee and Swaminathan (2001, hereafter GLS), Claus and Thomas (2001, hereafter CT), and Gode and Mohanram (2003, hereafter GM). Despite the use of different methods of estimation, the implied cost of equity is essentially the required discount rate or internal rate of return that equates an asset’s market value or stock price to the present value of all expected future dividends. However, market expectations for future dividends are not easily observable. Thus, this stream of research uses analysts’ earnings forecasts as the baseline for market expectations of earnings and dividends. For example, the GLS measure of implied cost of equity capital is modeled with the following equation:

$$P_t = B_t + \sum_{i=1}^{\infty} \frac{E_t[NI_{t+i} - r_e B_{t+i-1}]}{(1 + r_e)^i} \quad (1)$$

where P_t and B_t are the stock price and book value per share at the time of measurement, NI is the analyst earnings forecast and r_e is the implied cost of capital or the internal rate of return that equates the left and right-hand side of the equation. While equation (1) is a theoretical valuation model, the following is the empirical implementation of the GLS model:

$$P_t = B_t + \sum_{t=1}^{11} \frac{FROE_{t+1} - r_{gls}}{(1 + r_{gls})} \cdot B_{t+i-1} + \frac{FROE_{t+12} - r_{gls}}{(1 + r_{gls})^{11}} \cdot B_{t+11} \quad (2)$$

r_{gls} is the empirical measure of the cost of equity capital, $FROE$ is the forecasted return on equity. For year t from one to three, $FROE$ is the future return on equity estimate based on the assumption of future book value as $B_{t+1} = B_t + k * FEPS_{t+1}$, where $FEPS_{t+1}$ is the mean of the one-year-ahead analyst earnings per share forecast in the Institutional Brokerage Estimate System

(I/B/E/S) summary data; and k is the dividend payout ratio. For t beyond three, $FROE$ is obtained through linear interpolation to median return on equity based on Fama and French's (1997) 48 industries. The cost of capital estimate is the numerical value obtained through an iterative computation that minimize the difference between price calculated from equation (2) and the actual market price at time t

The Claus-Thomas (CT) measure of the implied cost of equity is estimated using the following equation:

$$P_t = B_t + \frac{AE_{t+1}}{(1+r_{ct})} + \frac{AE_{t+2}}{(1+r_{ct})^2} + \dots + \frac{AE_{t+5}}{(1+r_{ct})^5} + \frac{AE_{t+5}(1+g_{ae})}{(r_{ct}-g_{ae})(1+r_{ct})^5} \quad (3)$$

AE_t is the abnormal earnings for year t equal to $FEPS_t - r_{ct} * B_{t-1}$, which is analyst forecast earnings ($FEPS_t$) minus a charge on the book value (B_{t-1}) in the form of cost of equity (r_{ct}); $FEPS_t$ is the mean I/B/E/S analyst forecasted earnings ranging from years $t+1$ to $t+5$. When I/B/E/S does not provide an earnings forecast for year $t+3$, $t+4$ or $t+5$, the available forecast for the preceding year is multiplied by one plus the consensus long-term growth rate in I/B/E/S to arrive at an estimate for the relative time horizon. The future estimated book value is arrived at in a way similar to that in GLS. The dividend payout ratio of each period is set to be at a fixed 50 percent of the forecasted earnings of the corresponding period. g_{ae} is the growth rate of abnormal earnings beyond year $t+5$ and is set to be the yield on 10-year U.S. Treasury bonds minus 3% in the CT measure

The GM measure does not require a computationally iterative solution for the positive root of a polynomial equation, but rather employs the following model:

$$r_e = A + \sqrt{A^2 + \left(\frac{FEPS_{t+1}}{P_t}\right)(g_2 - r_f - 0.03)} \quad (4)$$

where $A = \frac{1}{2} \left((r_f - 0.03) + \frac{DPS_{t+1}}{P_t} \right)$. r_f is the yield of 10-year constant-maturity treasury bond and g_2 is the I/B/E/S consensus

long-term growth rate. DPS_{t+1} is the forecasted earnings ($FEPS_{t+1}$) times dividend payout ratio k .

Data and Regression Model

I obtain analyst forecasts and growth estimates from I/B/E/S unadjusted historical summary forecasts, book values from the Compustat North America Fundamental Annual Xpressfeed (XPF), and stock prices from CRSP. The three estimates of implied cost of equity capital (GLS, CT and GM) are measured at June of every year. The average of the three measures of cost of capital in excess of the 10-year U.S. Treasury constant maturity rate is the cost of equity (ceq) in the literature and the dependent variable in the regression analysis

I use the Kinder, Lydenberg and Domini's (KLD) Stats database for rating whether a firm is considered having social concerns over disputes with the taxing authorities. The KLD Social Index is a leading corporate social responsibility monitor and I use its ratings to investigate the extent to which social concerns on a firm's tax disputes affect firms' implied cost of equity. In addition, I include variables identified in the literature to control for other significant firm characteristics and risk factors that are associated with its cost of equity:

$$\begin{aligned} ceq_{i,t} = & \delta_0 + \delta_1 TAXD + \delta_2 \ln(DM) + \delta_3 Indus_{i,t} \\ & + \delta_4 \ln(Size)_{i,t} + \delta_5 \ln(BM)_{i,t} \\ & + \delta_6 \ln(AFD)_{i,t} + \delta_7 Ltg_{i,t} + \delta_8 Beta_{i,t} + \varepsilon_{i,t} \end{aligned}$$

$TAXD$ is an indicator variable based on the KLD Index. It takes the value of one if the KLD index indicates social concerns over the tax disputes and zero otherwise. $Indus$ is the average of industrial implied cost of equity premium based on Fama-French (1997) 48 industries. $Size$ is the market capitalization (in millions) of the firm; BM is the book-to-market ratio; AFD is the analyst forecast dispersion, measured as the standard deviation of one-year-ahead analyst forecast divided by the mean of forecasts. I include the natural log of BM , $Size$ and AFD in the regression analysis following the established empirical practice. Ltg is the consensus long-term growth rate provided by I/B/E/S and $Beta$ is

the market beta in the Capital Asset Pricing Model (Fama and French 1993). As the measures of implied cost of equity already consist of estimates on return on equity and profitability (forecasted future return on equity and abnormal earnings discussed in the previous section), I do not include return on equity or firm profitability as separate control variables.

Table 1 has the descriptive statistics for the full sample (1995-2009) and the samples partitioned by whether the firm-year observation is rated to have social concerns over tax disputes. The cost of equity premium (*ceq*) is presented in basis points. The samples means of *ceq* in Table 1 suggest that observations rated by KLD as having tax-dispute concerns incur higher cost of equity capital. On the other hand, there appears to be no major differences in the sample means between firm-years with tax concerns and without tax concerns in terms of firms' debt-to-market level, industry average premium, long-term growth, analyst forecast dispersion and market beta. There seems to be some difference in *Size*, or the market capitalizations between the partitions. Firm-years with tax concerns seem to have larger market capitalization than those that do not. Therefore, the hypothesis will be tested using the regression model controlling for the effect of *Size* on implied cost of equity.

Table 2 shows the Pearson as well as Spearman correlations between the tax concern rating (*TAXD*) and other factors influencing implied cost of equity. In general, the magnitudes of the correlations are small. We may thus infer that the rating about tax concerns in KLD measures a construct of corporate social performance that is different from general corporate financial performance.

Table 3 has the regression results on the relationship between social concerns of tax disputes and firms' cost of capital measured in basis points. The effect is both statistically and economically significant. The coefficient on *TAXD* suggests that the implied cost of equity premium is almost 100 basis points (one percentage point) higher than observations without tax concern ratings. This effect is after controlling for firm size and other major

factors related to cost of equity. In fact, the negative and significant sign on *Size* is consistent with the asset pricing theory in Fama and French: small-cap stocks have more risk than large-caps and therefore investors should demand higher (lower) returns based on *Size*. Since firms with social concerns about their tax disputes are generally larger than those that are not (See Table 1), it will only bias against finding a significant and *positive* relationship between tax disputes and cost of capital if tax disputes are just another manifestation of firm size. The significant and positive coefficient on *TAXD* shows that social concern about tax disputes is a distinct measure from other observable financial measures. The signs of coefficients on other control variables are also in line with prior literature. Book-to-Market is shown to be another major risk factor. Higher growth firms generally are more risky and need to offer higher returns. The negative sign on analyst forecast dispersion is consistent with Miller (1977) in a capital market with short-sale constraints and heterogeneous expectations.

CONCLUSION

I contribute to the research stream on corporate social responsibility by focusing on the effect of social concerns about tax disputes on firms' cost of equity. The regression analysis and statistical evidence in the study suggests that firms could reduce their cost of equity by not engaging in open tax disputes that lead to social concerns. This economic effect on cost of equity is significant, showing a nearly one-percentage point reduction in the cost of equity if firms can improve their social performance rating and avoid tax disputes with federal, state, local and foreign authorities. The use of regression analyses, however, can only suggest an association, rather than prove the causal relationship between tax concerns and cost of equity. Future research using surveys and interviews with corporate executives and investors such as mutual fund managers can provide further insights on the relationship between social ratings and capital market performance.

The inference in the study also indicates that public interests and shareholder preferences are not mutually exclusive propositions. The underlying reputational and political costs may be an important risk factor for firms that are considered aggressive players in the tax field. In addition to reputational and political costs, it is also possible that investors also weigh the costs and benefits of an uncertain cash-flow outcome based on open tax audits. Taken together, the result in this research supports the effort of developing a social agenda. A social performance monitor with notes on corporate tax behaviors can have a positive effect in raising the awareness of investors on the underlying risks when firms choose to take a confrontational approach with the authorities. In summary, this study suggests that public firms may enhance their relationship with key stakeholders and lower the cost of their equity capital by acting as non-aggressive taxpayers.

REFERENCES

- Alexander, G., and R. Buchholz: 1978, Corporate Social Responsibility and Stock Market Performance *Academy of Management Journal* 21(3), 479-486.
- Barnett, M.: 2007, Stakeholder Influence Capacity and the Variability of Financial Returns to Corporate Social Responsibility, *Academy of Management Review* 32(3), 794-816.
- Boyle, E., M. Higgins and S. Rhee: 1997, Stock Market Reaction to Ethical Initiatives of Defense Contractors: Theory and Evidence, *Critical Perspectives on Accounting* 8, 541-561.
- Braithwaite, V. 2009. Dancing with the tax authorities. In *Taxing Democracy: Understanding Tax Avoidance and Evasion*, Aldershot: Ashgate, pp.15-40
- Bronco, M and L. Rodrigues. 2006, Corporate Social Responsibility and Resource-based perspectives. *Journal of Business Ethics*. 69: 111-132.
- Cape, J. and H. Dayananda. 2012. Tax Dispute Resolution Procedures in the United Kingdom. *Tax Notes International* October 2012: 389-390.

- Claus, J., and J. Thomas. 2001, Equity Premia as Low As Three percent? Empirical Evidence from Analysts' Earnings Forecasts For Domestic and International Stock Markets, *Journal of Finance* 56, 1629-1666.
- Cox, P., and P.G. Wicks. 2011, Institutional Interest in Corporate Responsibility: Portfolio Evidence and Ethical Explanation *Journal of Business Ethics* 103: 143-165.
- Elton, E: 'Expected return, Realized Return, and Asset Pricing Tests. *Journal of Finance* 54 (1999): 1199-1220.
- Fama, E.: 1976. *Foundations of Finance: Portfolio Decisions and Security Prices*, New York: Basic
- Fama, E and K.1993. French Industry Cost of Equity *Journal of Financial Economics* 43: 153-193
- Friedman, M.: 1962, *Capitalism and Freedom*, Chicago: University of Chicago Press. [The correct spelling is Friedman.]
- Friedman, M.: 1970. The Social Responsibility of Business Is to Increase Profits, *New York Times Magazine*, Sept. 13, 122-26.
- Gebhardt, L, C. Lee and B. Swaminathan: 2001, Toward an Implied Cost of Equity Capital, *Journal of Accounting Research* 39, 135-176.
- Gode, D., and P. Mohanram: 2003, Inferring cost of equity capital using the Ohlson-Juttner Model , *Review of Accounting Studies* 8, 399-431.
- Karpoff, M. and J. Lott. 1993, The reputational penalty firms bear from committing criminal fraud *Journal of Law and Economics* 36: 757 -802.
- Miller, E. (1977). Risk, Uncertainty, and Divergence of Opinion. *Journal of Finance*, 32, 1151-68.
- Moskowitz, M.: 1972, Choosing Socially Responsible Stocks, *Business and Society Review* 1, 71-75.
- Schlank, R: Key to Effective Tax Governance: Straight Talk about Tax Risks. *Tax Notes*. June 27, 2011
- Vance, S.: 1975. Are Socially Responsible Corporations Good Investment Risks? *Management Review* 64, 18-24

Table 1: Summary Statistics

Variable	Full sample (n=17,975) Mean	Sample without tax disputes (n=17,415) Mean	Sample with tax disputes (n=560) Mean
<i>Ceq</i>	464.92	462.40	543.40
<i>Ln(DM):</i>	0.25	0.25	0.27
<i>Indus</i>	0.06	0.06	0.07
<i>Ln(Size)</i>	14.52	14.47	16.05
<i>Ln(BTM)</i>	0.38	0.38	0.41
<i>Ln(AFD)</i>	0.07	0.07	0.07
<i>Ltg</i>	0.15	0.15	0.12
<i>Beta_mkt</i>	1.06	1.06	1.00

Ceq = implied cost of equity capital, in basis points

Ln(DM) = the natural log of the debt to market ratio

Indus = the average industry implied cost of equity premium by on Fama-French 48 industries

ln_Size = the natural log of firms size in millions;

ln_BTM = the natural log of firms' book-to-market ratio

Ln(AFD) = the natural log of the dispersion of one-year ahead analyst earnings forecast, measured as the standard deviation of forecasts dividend by mean forecast;

Ltg = the consensus long-term growth rate provided by I/B/E/S;

Beta_mkt = the market beta relative to the market portfolio returns in Fama and French (1997).

Table 2: Pearson (upper right) and Spearman (Lower Left) Correlation Matrix

	1	2	3	4	5	6	7	8	9
1. Tax Disputes	1.000	0.045 <.0001	0.013 0.076	0.009 0.253	0.179 <.0001	0.022 0.003	0.007 0.339	-0.065 <.0001	-0.013 0.076
2. Ceq	0.044 <.0001	1.000	0.189 <.0001	0.097 <.0001	-0.135 <.0001	0.264 <.0001	-0.069 <.0001	0.033 <.0001	0.025 0.001
3. Ln(DM)	0.042 <.0001	0.203 <.0001	1.000	0.039 <.0001	-0.038 <.0001	0.448 <.0001	0.091 <.0001	-0.298 <.0001	0.012 0.116
4. Indus	0.033 <.0001	0.440 <.0001	0.087 <.0001	1.000	-0.009 0.254	0.052 <.0001	0.014 0.070	-0.025 0.001	0.012 0.115
5. Ln(Size)	0.163 <.0001	-0.175 <.0001	0.062 <.0001	-0.050 <.0001	1.000	-0.335 <.0001	-0.133 <.0001	-0.129 <.0001	-0.029 0.000
6. Ln(BTM)	0.013 0.083	0.330 <.0001	0.452 <.0001	0.178 <.0001	-0.326 <.0001	1.000	0.151 <.0001	-0.286 <.0001	0.027 0.000
7. Ln(AFD)	0.051 <.0001	0.003 0.659	0.078 <.0001	0.088 <.0001	-0.155 <.0001	0.231 <.0001	1.000	0.071 <.0001	0.096 <.0001
8. Ltg	-0.084 <.0001	0.022 0.003	-0.467 <.0001	-0.048 <.0001	-0.149 <.0001	-0.364 <.0001	0.041 <.0001	1.000	0.167 <.0001
9. Beta_mkt	-0.009 0.219	0.033 <.0001	-0.044 <.0001	0.032 <.0001	0.009 0.219	0.022 0.003	0.223 <.0001	0.204 <.0001	1.000

Table 3: Implied cost of equity premium (in basis points) and Social Rating on Tax Disputes: 1995 -2009
n=17,975

Variable	Parameter Estimate	Standard Error	t Value
Intercept	352.672	27.061	13.03
TAXD	104.394	12.824	8.14
<i>Ln(DM</i>	128.416	7.884	16.29
<i>Indprem</i>	382.905	31.899	12.00
<i>Ln(Size)</i>	-11.439	1.595	-7.17
<i>Ln(BTM)</i>	379.690	13.557	28.01
<i>Ln(AFD)</i>	-269.307	14.026	-19.20
<i>Ltg</i>	618.637	32.309	19.15
<i>Beta_mkt</i>	1.421	2.689	0.53

Adjusted R-square=12.19%