DOES CORPPORATE GOVERNANCE MATTER IN VALUATIONOF OF TAX AVOIDANCE?: EVIDENCE FROM ANTI-TAKEOVER LEGISLATION

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ABSTRACT

This study examines whether corporate governance moderates the relation between tax avoidance and firm value. To obtain exogenous variation in corporate governance, this study focuses on the passage of state anti-takeover laws, specifically business combination (BC) laws, which weakens corporate governance and increases the opportunity for managerial expropriation by lessening the threat of hostile takeovers. I find that tax avoidance is negatively associated with firm value at firms with weakened corporate governance, consistent with a complementary relation between tax avoidance and rent extraction as in Desai and Dharmapala (2006). This paper provides additional evidence from an agency perspective on corporate tax avoidance in Desai and Dharmapala (2009) by investigating the effect of the level of tax avoidance on firm value given a weakened corporate governance circumstance. In a natural experimental setting, the difference-in-differences estimator addresses causality of interest variables, which suggests that the distinction between my finding and that of Desai and Dharmapala (2009) is attributable to the ability of BC law passage to make a clear identification of the variation in corporate governance.

Keywords: corporate governance, tax avoidance, firm value, BC law passage

INTRODUCTION

Many U.S. firms engage in tax avoidance activities to reduce their tax burden. By engaging in tax avoidance activities, firms obtain substantial benefits (i.e., tax savings increases in after-tax income and cash flows) while they are exposed to considerable cost (e.g., tax planning and implementation costs, penalties imposed by IRS, reputation cost). The traditional view of corporate tax avoidance suggests that tax avoidance should enhance shareholder wealth by transferring resources from the government to shareholders. On the contrary, a principal-agency framework proposes that opportunistic managers may facilitate the nature of aggressive tax planning to extract their own private benefits. Because aggressive tax planning often requires complex and opaque tax transactions that can create a shield for expropriation, investors may believe that aggressive tax planning is accompanied by managerial rent extraction and hence discount firm value. Thus, the agency perspective of tax avoidance suggests that tax avoidance may not always be the best for shareholders because the direct costs related to tax avoidance transactions and non-tax costs, particularly agency costs, can offset tax savings.

Corporate governance should be another important determinant of the valuation of tax avoidance. For example, investors potentially discount tax avoidance activities at poorly governed firms because lower quality corporate governance increases opportunities for rent extraction through tax planning. However, higher quality firm governance can mitigate this agency problem and hence allows for a more positive tax avoidance effect on firm value. In summary, corporate governance plays a role in moderating the relationship between tax avoidance and firm value.

Few papers directly investigate the effect of corporate governance on the relationship between tax avoidance and firm value. Desai and Dharmapala (2009) examine the relation between corporate tax avoidance and firm value and how corporate governance moderates this relationship in large samples. They find no average effect of tax avoidance on firm value, but they do find that tax avoidance is positively associated with firm value at firms with strong corporate governance (i.e., higher proportion of institutional ownership or fewer antitakeover provisions). Their explanation of this result is that the presence of good monitoring mechanisms prevents managers from extracting rents through aggressive tax planning, hence increasing firm value. However, they fail to find any evidence of a relationship between tax avoidance and firm value under weak corporate governance settings because the positive effect of tax avoidance on firm value is potentially offset by the increased opportunity for rent extraction. My study extends their research by providing additional evidence on the effect of tax avoidance on firm value under weak corporate governance circumstances.

My paper addresses the endogeneity concern of corporate governance measures (e.g., G-index, Gompers et al. 2001) by using the passage of anti-takeover legislations, specifically business combination (BC) laws as an exogenous variation in corporate governance. Several papers such as Garvey and Hanka (1999), Bertrand and Mullainathan (2003), Cheng et al. (2005), and Giroud and Mueller (2010) use the passage of BC laws to identify exogenous variation in corporate governance. BC laws were passed by thirty states between 1985 and 1991 at the state level. These laws impose a restriction on certain transactions, such as mergers and asset sales, between a large shareholder and a firm for a period ranging from three to five years. Consequently, the passage of BC laws reduces the threat of hostile takeovers and hence weakens corporate governance (Bertrand and Mullainathan, 2003). Because this state-induced shock randomly assigns firms to a weakened corporate governance group, it produces an exogenous variation in corporate governance.

In the main test, I examine the relationship between tax avoidance and firm value and how corporate governance plays a role in this relationship. I use the exogenous variation in corporate governance induced by the passage of anti-takeover legislation at the state level as a natural experiment. This variation allows me to use a difference-in-differences (DD) research design, which results in the clear identification of the causal effects of the BC laws passage. Moreover, the nature of the passage of BC laws enables me to look at the effect of tax avoidance on firm value at firms with weakened corporate governance, which has not yet been explored. Consistent with the notion that tax avoidance and managerial rent extraction are complementary activities (Desai and Dharmapala, 2006). I find that in general, tax avoidance is negatively associated with firm value at firms in states that passed BC laws. Results are slightly different depending on tax avoidance measures. For example, the coefficient of interaction term between BC dummy and low three-year cash effect tax rates dummy is not statistically significant. This result suggests that investors tend to discount aggressive tax avoidance activities for firms with weakened corporate governance because of the complementary relationship between tax avoidance and rent extraction.

This paper makes several contributions to related extant literatures. First, I provide large sample evidence of how investors value tax avoidance activities in general and how this valuation varies with corporate governance. More specifically, I scrutinize the agency perspective of tax avoidance by directly looking at poorly governed firms where agency problems arise. A few small sample studies have shown a negative relation between firm value and certain aggressive tax planning (Desai and Hines Jr, 2002 and Cloyd et al. 2003) but few studies have investigated this relationship in a large sample (Desai and Dharmapala 2009).

Second, this study introduces a source of exogenous variation in corporate governance and shows that this variation has a different effect on firms with a high level of tax avoidance and a low level of tax avoidance in terms of firm value. The passage of state anti-takeover laws increases firms' managerial protection from a hostile takeover, hence weakens corporate governance. This shock makes a clear identification of the variation in corporate governance by using a DD estimator in a natural experiment setting. Thus, my results are less susceptible to an endogeniety issue that is endemic in extant literatures.

HYPOTHESIS DEVELOPMENT

Tax avoidance can be either a value-enhancing behavior or a shield for higher agency costs between managers and shareholders. In addition, corporate governance potentially plays a critical role in moderating the relation between tax avoidance and firm value. Prior studies (Desai and Dharmapala, 2009) suggest that firms with strong corporate governance have better monitoring systems than firms with weak corporate governance and thus are less likely to exhibit managerial opportunistic behavior. Strong corporate governance could alleviate outside investors' concerns about potential agency problems underlying tax aggressiveness.

However, if tax avoidance creates a shield for managers to expropriate firms' resources, then tax aggressiveness would create a severe agency problem for firms with weak corporate governance. Since the agency costs may substantially outweigh any potential tax savings from tax avoidance activities, outside investors will discount those firms for being tax aggressive. Weak corporate governance will provide another layer of protection for insider rent extraction. Thus, the agency cost view of tax avoidance suggests that tax avoidance is negatively associated with firm value as corporate governance is weakened. I predict that aggressive tax avoidance decreases firm value when corporate governance is weakened.

H1: The level of tax avoidance is negatively associated with firm value for firms with weak corporate governance relative to firms with strong corporate governance.

SAMPLE SELECTION AND VARIABLE MEASUREMENT

Sample Selection

The main data source is Standard & Poor's Compustat. Following Bertrand and Mullainathan (2003), a firm must be located and incorporated in the United States. Financial institutions (SIC 6000-6999) and utilities (SIC 4900-4999) are excluded because they operate in regulated industries and confront different tax and book rules than firms in other industries. All firm-year observations with either negative or missing values for total assets or pretax income are eliminated. In addition, all firm-years with negative book value of equity are deleted because of the potential distortion from highly distressed firms. The sample period is from 1980 to 1995 which is similar to Bertrand and Mullainathan (2003)'s sample period (1976 to 1995). The sample period starts from 1980 to ensure that I have enough sample years before the passage of BC laws but as well not too long to capture noise other than BC laws passage. The above selection criteria results in 8,593 firms and 65,228 firm-year observations.

According to Romano (1993), anecdotal evidence suggests that changes in states of incorporation during the sample period are quite rare. Also, Bertrand and Mullainathan (2003) randomly sampled 200 firms from their panel and check (using Moddy's Industrial Manual) whether any of these firms had changed states of incorporation during their sample period (1976 to 1995). They find that only three firms had changed their state of incorporation, and all of them to Delaware, and predated the year 1988 in which Delaware passed BC laws by several years.

Variable Measurement

In this study, I utilize a wide range of tax avoidance measures from more aggressive tax activities to less tax aggressive activities to examine my research question. More specifically, I use the shelter prediction score developed by Wilson (2009) which reflects more aggressive tax planning. Also, I employ the long-run cash, GAAP, and current effective tax rates over the past three years, which represents less aggressive tax planning (Dyreng et al. 2008). As a robustness test, I also examine the annual cash, GAAP, and current effective tax rates.

I use the annual quintile rank of the tax avoidance measures to create High (top 20%), Medium (20% to 80%), and Low (bottom 20%) dummies for each tax avoidance variable based on the sample distribution. I use dummies in place of a continuous tax avoidance variable to mitigate potential non-linearity concerns and to reduce noise in estimates. All tax avoidance measures are interacted with BC_{it} dummy variable that equals one if firm *i* is incorporated in a state that has passed a BC law at time *t* and zero otherwise for the main analysis.

Following Desai and Dharmapala (2009), I use Tobin's q as my measure of firm value. I include control variables based on prior literature. I control for firm size, leverage, net operating loss carryforwards (NOL) foreign income, research and development expenses, intangible assets, capital expenditure, market to book ration, and net property, plant, and equipment are included as control variables.

EMPIRICAL DESIGN

The Effect of the Passage of BC Laws on tax avoidance

Before the main test, I first examine whether the passage of BC laws changes the level of tax avoidance to ensure that there is no relation between this event and the level of tax avoidance. This test is necessary because if the passage of BC laws affects the level of tax avoidance, it is difficult to distinguish whether firm value varies due to variation of corporate governance or due to managers' choice of tax avoidance induced by changes in corporate governance. If this is the case, the passage of BC laws is no longer an exogenous shock to individual firms and hence the main regression analysis is not implementable.

This study is about, given a weak corporate governance, how different levels of tax avoidance affect firm value. Thus, I assume that the level of tax avoidance is independent of the BC laws passage, and I expect that there is no association between the level of tax avoidance and the passage of BC laws tested by the following regression:

$$TA_{it} = b_0 + b_1 BC_{it} + \sum b_{2k} Controls_{it} + e_{it} \quad (1)$$

where TA_{it} is a measure of tax avoidance (described in the measurement section) of firm *i* at time *t*. BC_{it} is a dummy variable that equals one if a firm is incorporated in a state that has passed a BC law in the year of the BC law passage and onwards, and zero otherwise. $Controls_{it}$ are control variables described in the measurement section. I add firm and year fixed effects.

The Effect of the Passage of BC Laws on valuation of tax avoidance

This paper examines the agency perspective of tax avoidance where the nature of weak corporate governance potentially offsets the increased after-tax firm value from tax savings because of the increased opportunities for managerial rent diversion. Thus, I test whether the passage of BC laws between 1985 and 1991 has a different effect on the relation between tax avoidance and firm value. I follow Giroud and Mueller (2010)'s difference-in-differences approach to identify the causal effect of the BC laws passage. In fact, this research design has been used by many researchers for identifying causal effects. The regression model is as follows:

$$Q_{it} = b_0 + b_1 BC_{it} + b_2 TA_{it} + b_3(BC_{it} \times TA_{it}) + \sum b_{4k} Controls_{it} + e_{it} \quad (2)$$

where Q_{it} is *Tobin's Q* of firm *i* at time *t*. BC_{it} is a dummy variable that equals one if a firm is incorporated in a state that has passed a BC law and zero otherwise. TA_{it} is a measure of tax avoidance (mainly, *Shelter*, *CETR3*, *GETR3*, and *CurreETR3*) of firm i at time t. $BC_{it} \times TA_{it}$ is the interaction term between BC dummy and a measure of tax avoidance. $Controls_{it}$ are control variables (described in the measurement section), and e_{it} is the error term. I add firm and year fixed effects.

I follow Bertrand and Mullainathan (2003) to control for local and industry shocks. I include industry-year and state-of-location-year controls, which are computed as the mean of the dependent variable (Tobin's q) in the firm's two-digit SIC industry and state of location, respectively, in a given year, excluding the firm itself. In the regression model, the firm and year fixed effects are included. This approach most likely accounts for correlation of the error terms and tax avoidance (1) across different firms in a given state of incorporation and year (i.e. cross-sectional correlation) and (2) within the same firm over time (i.e. within-firm serial correlation) (Petersen, 2009)

EMPIRICAL RESULTS

Overall, the coefficients on the interaction terms for each tax avoidance measure are significant at the 1% level for *Shelter* and at the 10% level for *GETR3* and *CurrETR* but only Cash ETR is not significant. The overall results are consistent with my hypothesis, H1. That is, I expect the negative association between tax avoidance and firm value at firms with weak corporate governance. Although the results are slightly different depending on what tax avoidance measure I use, it seems intuitive to have the different results on different tax avoidance measures. More specifically, the negative effect of *Shelter* on firm value is more conspicuous than the ETR measures because *Shelter* captures more aggressive tax planning (e.g., non-compliance, tax evasion, and tax sheltering). In addition, the ETR measures could capture some noise rather than true level of tax avoidance (because these measures cover broader tax avoidance activities), so the coefficients of estimates are relatively insignificant. However, after scrutinizing the third analysis where I divide the sample into three group, the results show more clear evidence that higher tax avoidance activities lead to decreases in firm value, suggesting that potential managerial rent extraction via tax planning comes into play in poorly governed firms. In sum, these results provide evidence that tax avoidance activity does not necessarily transfer the value from the government to shareholders.

CONCLUSION

This study directly examines how corporate governance moderates the relation between tax avoidance and firm value using the passage of BC laws as an exogenous variation in corporate governance. While corporate tax avoidance is traditionally viewed as value-enhancing activity, a principle-agency framework indicates that investors may not always value tax avoidance activities because of potential managerial opportunism through tax planning. Consistent with the notion that tax avoidance and managerial rent extraction are complementary activities, I find that, in general, tax avoidance is negatively associated with firm value at firms with weakened corporate governance. This result suggests that investors tend to discount tax avoidance activities at firms with weak corporate governance because low quality of corporate governance allows opportunistic managers for more rent extraction through aggressive tax planning.

My paper contributes to the related extant literature in two ways. First, I introduce a source of exogenous variation in corporate governance and utilize this source in a natural experiment setting to identify the causal effect of corporate governance on the relationship between tax avoidance and firm value. Second, using publicly traded firms in Compustat during 1980 to 1995, my paper provides large sample evidence on how investors value tax avoidance activities in general depending on corporate governance quality. More importantly, this study scrutinizes the agency perspective of tax avoidance by directly looking at firms with weakened corporate governance where agency problems arise. In conclusion, this paper suggests that corporate governance plays a crucial role in understanding the consequence of tax avoidance activities.

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