

Corporate Social Responsibility And Tax Avoidance: Evidence From Korean Firms

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ABSTRACT

This study examines the relationship between corporate socially responsible (CSR) activities and tax avoidance using residual book-tax differences (BTD), year residual BTD and total BTD. Using a sample of 1,148 publicly listed Korean firms on Korean Stock Exchange (KSE) covering periods between 2004 and 2009 it finds that the firms with higher CSR activities are less likely to avoid taxes regardless which proxy of tax avoidance is used. This finding is confirmed with two stage least square (2SLS) method after accounting for endogeneity of CSR. It also tests how seven different CSR activities affect tax avoidance, and finds that social services, satisfaction of employees and contributions to economic development are negatively related to tax avoidance. Overall, the empirical results of this paper support the previous studies arguing the negative relationship between tax avoidance and CSR.

Keywords: Tax Avoidance; Corporate Social Responsibility; Book-Tax Differences

1. INTRODUCTION

Since Scholes and Wolfson (1992) first show that managers have incentives to pursue tax strategy in a way that it minimizes corporate taxes in order to maximize firm's profit the number of studies have been done on tax strategy. As Zimmerman (1983) argues, however, minimizing taxes may not be always the most efficient tax strategy because it may occur additional costs (i.e. government regulations and auditing by non-government organization (NGO)). Thus, it is important to take into account specific corporate environments such as financing choices, corporate governance, tax-related laws, government policy, compensation policy, risk management decisions, and corporate social responsibility (here after, CSR) to see how taxes influence corporate financial decision-making (See Hanlon & Heitzman (2010)). Even though the extensive research offers empirical evidence on such relationship between tax strategy and corporate environments, to knowledge there are few studies which examine how CSR affects managers' decision-making on taxes.

The objective of this study is to investigate how tax avoidance as one of tax strategies affects firms' CSR activities. In 2010 International Organization for Standardization (ISO) adopted ISO 26000 on Guidance for social responsibility. It implies that the stakeholders become increasingly aware of the need for and benefits of firms' social responsibilities, and accordingly they become one of crucial factors managers would consider for decision-making and management strategy.

Freedman (2003) argues that tax aggressiveness of firms with high CSR activities tends to occur additional costs due to high expectation and understanding of stakeholders on social responsibilities. Thus, it is expected for managers not to avoid taxes in order to reduce potential risks and induce disclosure effects of financial reporting. Watson (2011) also shows that firms with low CSR activities are more likely to be tax-aggressive because stakeholders of such firms are not surprised by socially irresponsible activities.

This study confirms the main findings of these two studies; the higher the level CSR of a corporation, the lower the level of tax avoidance. However, this study is different from Freedman (2003) and Watson (2011) in several points. First, Freedman (2003) offers only conceptual analysis the relationship, but does not provide empirical evidence. Even though Watson (2011) empirically tests the relationship between CSR values and tax avoidance, his empirical studies are limited to firms with low CSR activities. Second, this study employs different measurement of tax avoidance from one used by Watson (2011). While Watson introduces the unrecognized tax benefits (UTBs) as a proxy for tax

aggressiveness, this study uses three different proxies to measure tax avoidance: residual book-tax differences (hereafter, BTDD), year residual BTDD and total BTDD.

This study uses Korean Economic Justice Institute (KEJI) Index database. It provides social responsibility scores of publicly listed Korean firms on Korean Stock Exchange (KSE) in seven major categories: financial prudence, fairness and transparency, social services, consumer protection, protection of environments, satisfaction of employees, contributions to economic development for each firm-year. The sample contains 1,148 firm-year observations covering periods between 2004 and 2009.

This study finds that the negative relationship between the firm's CSR values and tax avoidance holds regardless which proxy of tax avoidance is used: The firms with higher CSR activities are less likely to avoid taxes. This finding is confirmed with two stage least square (2SLS) method after accounting for endogeneity of CSR. This paper also tests how seven different CSR activities affect tax avoidance. It finds that social services, satisfaction of employees and contributions to economic development are negatively related to tax avoidance.

The remainder of the paper is organized as follows. Section 2 provides previous literature. Section 3 develops the hypothesis of this paper. Section 4 describes the data and research design. Empirical results are reported and analyzed in Section 5. Section 6 concludes.

2. THE PREVIOUS LITERATURE

Zimmerman (1983) tests whether the firm's political costs as a proxy for firm size are associated with corporate tax rates. His study finds the positive relationship between them. He argues that larger size of firms tends to bear higher political costs and the corporate tax rates are one of a firm's political costs, and thus as the firm size gets larger the corporate tax rates becomes higher and the tax benefits would be smaller.

The study by Mills and Sansing (2000) is to examine how BTDD affect the probability of auditing transaction and collecting additional taxes. Using Internal Revenue Service (IRS) data from the Coordinated Examination Program they find that the probability of auditing transaction by government increases as the a positive BTDD exists due to the possibility of tax avoidance.

Plesko (2004) argues that the book-tax income spread provides tax authorities the information on adaptation to tax payment and investors better understanding on the quality of the book-tax spread. It, thus, implies that tax authorities and investors can make effective decision-making through the book-tax income spread and especially obtain the information on tax avoidance.

3. HYPOTHESIS DEVELOPMENT

For CSR behaviors to attract investors they should be able to reach not only maximization of economical values but also realization of proper social and ethical values. In order to achieve these two purposes CSR behaviors will be invested based on both financial and ethical criteria. CSR behaviors are one type of investment, not charity, but it would not be done by only financial purposes. It may be selected due to ethical reasons but may not be invested due to financial criteria.

From the aspect of financial criteria investors who prefer CSR activities may reduce uncertain risk because of low information asymmetry as they invest to firms with higher CSR activities. Thus, managers can reduce the cost of equity through CSR activities by satisfying stakeholders who want to reduce information asymmetry, and strategically accomplish the improvement of firm values and higher financial achievement (Ghoul, Guedhami, Kwok & Mishra, 2010).

Tax investigation is one of firm's uncertain risks. Firms are levied huge penalties and additional taxes, and experience a decrease in work efficiency and legal trouble during the period of tax investigation. Firms with higher CSR activities, which reduce costs of equity by decreasing uncertain risks have higher additional opportunity costs on tax

investigation than firms with lower CSR activities. Therefore, firms with higher CSR activities are more likely to be careful on tax investigation.

Manzon and Plesko (2002) argues that, the probability of tax investigation increases in the BTD. Mills and Sansings (2000) also show that collected additional taxes are larger as the BTD are bigger. Moreover, Plesko (2004) argues that the book-tax income spread provides tax authorities the information on adaptation to tax payment and investors better understanding on the quality of the book-tax spread, and thus tax authorities and investors can make effective decision-making through the book-tax income spread and especially obtain the information on tax avoidance.

All of these arguments imply that firms with higher CSR activities, which have greater uncertain risks are less likely to avoid taxes than firms with lower CSR activities. It provides us empirically testable hypothesis, Hypothesis 1.

H1: Corporate social responsibility activities are negatively related to tax avoidance.

Social responsibility scores of public Korean firms on Korean Stock Exchange (KSE) in seven major categories: financial prudence, fairness and transparency, social services, consumer protection, protection of environments, satisfaction of employees, contributions to economic development for each firm-year.

I also test how each individual seven factors of corporate social activities scores provided by KEJI Index dataset is associated with CSR activities. It provides seven following testable hypothesis.

H1(a): Financial prudence is negatively related to tax avoidance.

H1(b): Fairness and transparency are negatively related to tax avoidance.

H1(c): Social services are negatively related to tax avoidance.

H1(d): Consumer protection is negatively related to tax avoidance.

H1(e): Protection of environments is negatively related to tax avoidance.

H1(f): Satisfaction of employees is negatively related to tax avoidance.

H1(g): Contributions to economic development are negatively related to tax avoidance.

4. RESEARCH DESIGN AND DESCRIBES THE DATA

4.1 Hypothesis Model

As a try to examine whether the firm's CSR activities affect tax avoidance, I estimate regression model below:

$$TS_{it} = a_0 + a_1CSR_A_{it} + a_2SIZE_{it} + a_3LEV_{it} + a_4ROA_{it} + a_5OCF_{it} + a_6FOR_{it} + a_7OWN_{it} + a_8MTB_{it} + a_9BIG4_{it} + a_{10}R\&D_{it} + YearDummy + IndDummy + \varepsilon_{it} \quad (1)$$

where TS is a variable for BTD of each firm for each year. I use three different measures for this variable: residual BTD following Desai and Dharmapala (2006) ($TS1$), included year residual BTD following Koh (2007) ($TS2$), and total BTD. CSR_A is number of KEJI Index (Total CSR scores), a proxy for firm's CSR activities. KEJI has announced the index for the manufacturing corporates listed in the KSE. It is a score grounded on the evaluation of a corporate's performance activities using seven major categories with different weights: financial prudence, fairness and transparency, social services, consumer protection, protection of environments, satisfaction of employees, and contributions to economic development. $SIZE$ is total assets, and enters as logarithm. LEV is the ratio of total liabilities to total assets. ROA is the return to assets. OCF is operating cash flow to assets. FOR is ration to total stock and OWN is ration to majority stock to total stock. MTB is market value to book value. $BIG4$ is a dummy variable and it is 1 if a sample is a big 4 accounting firm, 0 otherwise. $R\&D$ is natural log of total R&D costs. $Year Dummy$ and $IndDummy$ are dummies for calendar year and K-SIC codes respectively.

Several studies investigate the relation between firm's characteristics and tax avoidance using a number of the proxies such as GAAP ETR, tax shelter and the BTDs (Hanlon & Heitzman, 2010). I use the BTDs because BTDs provide information to the market (Hanlon, 2005). I also estimate equation (1) for each combination of three different BTDs and each CSR activities.

The main focus of this study is the coefficient on CSR activities (a_1). I expect a negative coefficient on the CSR activities variable when BTDs (residual, year residual book- and total) are used as measures of tax avoidance as mentioned in section 3.

Also, I control for other factors harmonized with tax avoidance measures to investigate whether the CSR activities contribute to corporates' overall level of tax avoidance. Some study argues that economies of scale and firm complexity are harmonized with additional tax planning opportunities (e.g., Mills 1998; Koh 2007). Accordingly, I control for firm size (*SIZE*), leverage (*LEV*), firm profitability (*ROA*), operating cash flow (*OCF*) and growth opportunities (*MTB*). In addition, I control for the big 4 accounting firms (*BIG4*), and Research & Development (*R&D*) costs.

Besides controlling for known determinants of tax avoidance, I also include firms' levels of ownership (*OWN*) and foreign ownership (*FOR*). While the tax plan can have important implications for the development of corporate governance can have an important effect on tax avoidance (Desai & Dharmapala, 2006; Koh, 2007)

I also test hypothesis 1 (a)-(g) using each individual seven index of corporate social activities provided by KEJI index to investigate the connection between corporate social activities and tax avoidance by equation (2).

$$TS_{it} = a_0 + a_1CSR1_{it} + a_2CSR2_{it} + a_3CSR3_{it} + a_4CSR4_{it} + a_5CSR5_{it} + a_6CSR6_{it} + a_7CSR7_{it} + a_8SIZE_{it} + a_9LEV_{it} + a_{10}ROA_{it} + a_{11}OCF_{it} + a_{12}FOR_{it} + a_{13}OWN_{it} + a_{14}MTB_{it} + a_{15}BIG4_{it} + a_{16}R\&D_{it} + YearDummy + IndDummy + \varepsilon_{it} \quad (2)$$

where $CSR1_{it}$ is financial prudence, $CSR2_{it}$ is fairness and transparency, $CSR3_{it}$ is social services, $CSR4_{it}$ is consumer protection, $CSR5_{it}$ is protection of environments, $CSR6_{it}$ is satisfaction of employees, and $CSR7_{it}$ is contributions to economic development of each sample for each year.

4.2. Sample Selection

This search for sample firms begins with firms that are included in KEJI 200 for the year 2004 through year 2009. In the step 2 I compute all variables used for the multivariate analyses. I have 1,800 observations to be merged with sample from step 1 after removing observations with missing values. The step 3 after requiring the necessary financial data disclosure on Kis-value as well as a matrix of control variables, also from Kis-value, reduces the sample size to 1,147 firms-years available for regression.

5. RESULT

5.1 Univariate Analysis

Table 1 provides descriptive statistics for the tax avoidance, CSR variables and control variables. In terms of *TS1*, the mean (median) is 0.009 (0.005). I also find that the mean (median) for *TS2* and *TS3* are both 0.009(0.004). Given that both Tax avoidance measure have the same numerator. For *CSR_A* I observe that the mean (median) is 3.851 (3.860). Table 1 reports the descriptive statistics of each individual seven index CSR. *CSR1* has a mean (median) of 2.719(2.733), *CSR2* has a mean (median) of 2.130 (2.733), *CSR3* has a mean (median) of 1.368 (1.329), *CSR4* has a mean (median) of 1.197 (1.227), *CSR5* has a mean (median) of 1.774 (1.740), *CSR6* has a mean (median) 1.774 (1.722) and *CSR7* has a mean (median) of 1.588 (1.598).

Table 1. Descriptive Statistics

	Mean	Std Dev	Min	1st	Median	3rd	Max
<i>TS1</i>	.009	.042	-.237	-.007	.005	.021	.306
<i>TS2</i>	.009	.042	-.239	-.006	.004	.021	.315
<i>TS3</i>	.009	.042	-.240	-.006	.004	.020	.314
<i>CSR_A</i>	3.860	.051	3.775	3.821	3.851	3.892	4.046
<i>CSR1</i>	2.719	.095	2.372	2.660	2.733	2.789	2.913
<i>CSR2</i>	2.130	.099	1.696	2.048	2.158	2.214	2.327
<i>CSR3</i>	1.329	.301	.560	1.121	1.368	1.565	2.349
<i>CSR4</i>	1.197	.119	.811	1.100	1.227	1.247	1.589
<i>CSR5</i>	1.774	.154	1.470	1.658	1.740	1.887	2.140
<i>CSR6</i>	1.706	.224	.971	1.559	1.722	1.875	2.163
<i>CSR7</i>	1.588	.167	1.049	1.472	1.598	1.712	2.066
<i>SIZE</i>	26.850	1.545	22.591	25.728	26.512	27.683	32.086
<i>LEV</i>	-1.057	.530	-4.072	-1.389	-.956	-.651	.167
<i>ROA</i>	.062	.050	-.326	.032	.056	.088	.359
<i>OCF</i>	.077	.078	-.194	.033	.076	.117	.539
<i>FOR</i>	16.289	17.539	.000	1.910	10.140	25.953	92.970
<i>OWN</i>	25.228	14.097	.000	14.425	22.310	33.385	81.400
<i>MTB</i>	.684	.581	.000	.310	.529	.868	6.945

Here: TS1: Residual book-tax differences (Desai & Dharmapala, 2006)

TS2: Included year residual book-tax differences (Koh, 2007)

TS3: Total book-tax differences (BTD).

CSR_Act: Number of KEJI Index (Total CSR scores)

CSR1: Number of Financial prudence

CSR2: Number of Fairness and transparency

CSR3: Number of Social services

CSR4: Number of Consumer protection

CSR5: Number of Protection of environments

CSR6: Number of Satisfaction of employees

CSR7: Number of Contributions to economic development

SIZE: Natural log of total assets

LEV: Total long-term debt / ATt-1

Table 2 presents correlations between measures of research regression model. Moreover, I also calculate variance in inflation factors (VIFs) when estimating research regression model 1 and model 2 to test for signs of multi-collinearity among the explanatory variables. This result confirms that no VIFs exceed twenty for any of explanatory variables, so multi-collinearity is not problematic in research regression model 1 and model 2.

Table 2. Pearson Correlations

	1	2	3	4	5	6	7	8	9	10
1. <i>TS1</i>	1	.993**	.993**	.007	.058*	.069*	-.036	.098**	.091**	-.182**
2. <i>TS2</i>		1	1.000**	.006	.057	.068*	-.042	.098**	.089**	-.174**
3. <i>TS3</i>			1	.003	.053	.067*	-.043	.099**	.088**	-.172**
4. <i>CSR_A</i>				1	.449**	.250**	.393**	.134**	.333**	.320**
5. <i>CSR1</i>					1	-.070*	-.134**	-.002	-.087**	-.045
6. <i>CSR2</i>						1	.000	.045	-.003	-.090**
7. <i>CSR3</i>							1	-.096**	.014	-.023
8. <i>CSR4</i>								1	.259**	-.188**
9. <i>CSR5</i>									1	-.199**
10. <i>CSR6</i>										1

(Table 2 continued)

	11	12	13	14	15	16	17	18	19	20
1. <i>TS1</i>	.038	.083**	-.075*	.397**	.201**	-.028	-.011	.046	.070*	-.048
2. <i>TS2</i>	.039	.075*	-.073*	.404**	.207**	-.031	-.011	.046	.067*	-.047
3. <i>TS3</i>	.038	.072*	-.074*	.409**	.187**	-.032	-.011	.044	.065*	-.047
4. <i>CSR_A</i>	.444**	.347**	-.065*	.235**	.252**	.249**	-.059*	.201**	.336**	.037
5. <i>CSR1</i>	.017	.090**	-.269**	.217**	.247**	.210**	-.061*	.134**	.259**	-.023
6. <i>CSR2</i>	-.018	.077**	.037	.043	.069*	-.026	.075*	.074*	.020	.014
7. <i>CSR3</i>	.074*	.151**	.027	.066*	.057	.018	.035	.026	.016	.035
8. <i>CSR4</i>	.001	.145**	.019	-.037	-.046	.012	-.051	.080**	-.055	-.012
9. <i>CSR5</i>	.183**	.445**	.079**	-.006	.035	.194**	-.055	.082**	-.019	-.032
10. <i>CSR6</i>	-.011	-.157**	.116**	-.055	-.079**	-.001	-.011	-.003	.128**	.033
11. <i>CSR7</i>	1	.226**	-.070*	.297**	.248**	.168**	-.075*	.125**	.329**	.086**
12. <i>SIZE</i>		1	.314**	.069*	.135**	.424**	-.104**	.304**	.130**	-.036
13. <i>LEV</i>			1	-.248**	-.142**	-.035	-.018	.108**	-.198**	.012
14. <i>ROA</i>				1	.420**	.210**	.081**	.079**	.377**	-.040
15. <i>OCF</i>					1	.143**	.046	.113**	.311**	-.019
16. <i>FOR</i>						1	.020	.199**	.298**	.005
17. <i>OWN</i>							1	.066*	-.007	.018
18. <i>BIG4</i>								1	.129**	-.073*
19. <i>MTB</i>									1	-.013
20. <i>R&D</i>										1

1) This table presents the Pearson Correlations among main variables

2) *, ** represent 5% and 1% level significantly respectively

5.2 Regression Results

To examine the tax avoidance of CSR, I regress the tax avoidance on various CSR proxies and control variables using multivariate regression. Table 3, Table 4 and Table 5 reports the regression results for the research model 1 and model 2. Table 3, Table 4 and Table 5 show that the regression coefficient for CSR_A is negative and significantly associated with tax avoidance ($P < 0.01$), support for hypothesis 1. Accordingly, CSR activities are negatively related to tax avoidance.

Table 3, Table 4 and Table 5 also show relate individual seven CSR components and tax avoidance. In this table, CSR3 (social services), CSR6 (satisfaction of employees) and CSR7 (contributions to economic development) activities are significantly negatively related to tax avoidance. This result support hypothesis 1, too.

The other hand, the regression for CSR1 (financial prudence), CSR2 (fairness and transparency) and CSR4 (consumer protection) are not significantly related to tax avoidance. These finding suggest that CSR activities components CSR1 (financial prudence), CSR2 (fairness and transparency) and CSR4 (consumer protection) do not affect tax avoidance.

One puzzling regression result is the coefficient on CSR5 (protection of environments), which loads significantly in a positive direction. It is only coefficient that is statistically significant in a positive direction. This suggests that CSR5 (protection of environments) is associated with tax avoidance.

To summarize, three main result emerge from the analysis in Table 3, Table 4 and Table 5. First, CSR activity is associated tax avoidance. Second, the only CSR components that negatively affect tax avoidance are CSR3 (social services), CSR6 (satisfaction of employees) and 7(contributions to economic development). Third CSR5 (protection of environments) have positively significantly tax avoidance.

Table 3. Result of Hypothesis 1 (by using Desai & Dharmapala (2006)' measure)

Variable	TS1(residual book-tax differences (Desai & Dharmapala, 2006)					
	Coeff.	t-stat.	VIF	Coeff.	t-stat.	VIF
Intercept	0.178	1.861*		-0.005	0.055	
CSR_A	-0.069	-2.639***	1.473			
CSR1				-0.009	-0.647	1.368
CSR2				0.006	0.527	1.066
CSR3				-0.006	-1.519	1.193
CSR4				0.008	0.807	1.193
CSR5				0.015	1.665*	1.741
CSR6				-0.012	-2.104**	1.416
CSR7				-0.039	-4.691***	1.674
SIZE	0.003	3.317***	1.803	0.002	2.150**	2.343
LEV	-0.002	-0.797	1.335	-0.001	-0.251	1.470
ROA	0.367	14.235***	1.410	0.387	14.817***	1.475
OCF	0.023	1.451	1.328	0.025	1.511	1.372
FOR	-0.033	-4.382***	1.434	-0.033	-4.458***	1.460
OWN	-0.016	-1.950*	1.065	-0.017	-2.181**	1.090
MTB	-0.003	-1.122	1.499	0.000	0.103	1.617
BIG4	0.002	0.584	1.228	0.002	0.770	1.244
R&D	-0.001	-0.439	1.036	0.001	0.280	1.060
Year D	Yes					
Industry D	Yes					
Adj. R ²	0.226			0.243		
F-value	19.650			16.345		

1) *, **, *** represent 10%, 5% and 1% level significantly respectively

Table 4. Result of Hypothesis 1 (by using Koh (2007)' measure)

Variable	TS2 (included year residual book-tax differences (Ko, 2007))					
	Coeff.	t-stat.	VIF	Coeff.	t-stat.	VIF
<i>Intercept</i>	0.189	1.978*		0.003	0.049	
<i>CSR_A</i>	-0.070	-2.656***	1.473			
<i>CSR1</i>				-0.009	-0.655	1.368
<i>CSR2</i>				0.006	0.527	1.066
<i>CSR3</i>				-0.007	-1.681*	1.193
<i>CSR4</i>				0.009	0.881	1.193
<i>CSR5</i>				0.016	1.693*	1.741
<i>CSR6</i>				-0.011	-1.981**	1.416
<i>CSR7</i>				-0.040	-4.794***	1.674
<i>SIZE</i>	0.003	2.979***	1.803	0.002	1.893*	2.343
<i>LEV</i>	-0.001	-0.564	1.335	0.000	-0.041	1.470
<i>ROA</i>	0.375	14.534	1.410	0.396	15.158***	1.475
<i>OCF</i>	0.027	1.642	1.328	0.028	1.726*	1.372
<i>FOR</i>	-0.032	-4.355***	1.434	-0.033	-4.443***	1.460
<i>OWN</i>	-0.016	-2.012*	1.065	-0.018	-2.238	1.090
<i>MTB</i>	-0.003	-1.216	1.499	0.000	0.006	1.617
<i>BIG4</i>	0.002	0.671	1.228	0.002	0.851	1.244
<i>R&D</i>	-0.001	-0.435	1.036	0.001	0.301	1.060
Year_D	Yes					
Industry_D	Yes					
Adj. R ²	0.232			0.250		
F-value	20.290			16.910		

1) *, **, *** represent 10%, 5% and 1% level significantly respectively

Table 5. Result of Hypothesis 1 (by using BTB)

Variable	TS3 (total book-tax differences)					
	Coeff.	t-stat.	VIF	Coeff.	t-stat.	VIF
<i>Intercept</i>	0.190	1.989*		0.004	0.067	
<i>CSR_A</i>	-0.070	-2.666***	1.473			
<i>CSR1</i>				-0.009	-0.674	1.368
<i>CSR2</i>				0.006	0.512	1.066
<i>CSR3</i>				-0.007	-1.690*	1.193
<i>CSR4</i>				0.009	0.884	1.193
<i>CSR5</i>				0.016	1.703*	1.741
<i>CSR6</i>				-0.011	-1.977**	1.416
<i>CSR7</i>				-0.040	-4.785***	1.674
<i>SIZE</i>	0.003	2.979***	1.803	0.002	1.888*	2.343
<i>LEV</i>	-0.001	-0.570	1.335	0.000	-0.051	1.470
<i>ROA</i>	0.389	15.090***	1.410	0.410	15.706***	1.475
<i>OCF</i>	0.012	0.731	1.328	0.013	0.822	1.372
<i>FOR</i>	-0.032	-4.363***	1.434	-0.033	-4.451***	1.460
<i>OWN</i>	-0.016	-2.009**	1.065	-0.018	-2.234***	1.090
<i>MTB</i>	-0.003	-1.206	1.499	0.000	0.012	1.617
<i>BIG4</i>	0.002	0.661	1.228	0.002	0.841	1.244
<i>R&D</i>	-0.001	-0.437	1.036	0.001	0.298	1.060
Year_D	Yes					
Industry_D	Yes					
Adj. R ²	0.235			0.252		
F-value	20.554			17.107		

1) *, **, *** represent 10%, 5% and 1% level significantly respectively

6. CONCLUSION

This study examines whether CSR activity affects tax avoidance. I contend that CSR activities are negatively related to tax avoidance. Using a sample of 1,477 Korean firms-year observations from 2004 to 2009 and controlling for other firm-specific determinants as well as industry and year fixed effects, I find that firms with CSR activity significantly associated with lower tax avoidance. The empirical results are consistent with hypothesis. Moreover, I find that not all individual seven CSR components are related to tax avoidance. In particular, while CSR activities for social services, satisfaction of employees and contributions to economic development contribute to lowering tax avoidance, CSR activities for financial prudence, fairness and transparency and consumer protection do not. This study contributes to examine how CSR affects managers' decision-making on taxes.

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REFERENCES

- Desai, M., & D. Dharmapala (2006). Corporate tax avoidance and high powered incentives. *Journal of Financial Economics*, 79, 145-179.
- Freedman, J. (2003). Tax and corporate responsibility. *Tax Journal*, 69(2), 1-4.
- Friedman, M. (1970). Social responsibility of business. *New York Times Magazine*
- Ghoul, S., Guedhami, O, Kwok, and Y, Mishra, Dev (2010). Does corporate social responsibility affect the cost of capital? working paper
- Hanlon, M. (2005). The persistence and pricing of earnings, accruals, and cash flows when firms have large book-tax differences. *Journal of Accounting Review*, 80(1), 137-166.
- Hanlon, M. & Heitzman, S. (2010). A review of tax research. *Journal of Accounting & Economics*, 50, 127-178.
- Koh. (2007). A study on corporate tax avoidance. *Korean Journal of Taxation Research*, 24(4), 9-40.
- Manzon, G., & G. A. Plesko (2002). The relation between financial and tax reporting measures of income. *Tax Law Review*, 55(2): 175 - 214.
- Mills. L. & R. Sansing. (2000). Strategic tax and financial reporting decisions: Theory and evidence. *Contemporary Accounting Research*, 17, 85-106.
- Mills. L. (1998). Book-tax differences and Internal Revenue Service adjustments. *Journal of Accounting Research*, 28, 343-356.
- Plesko, G. (2004). Corporate tax avoidance and the properties of corporate earnings. *National Tax Journal*, 57(3), 729-738.
- Scholes, M. & M. Wolfson (1992). *Taxes and business strategy: A planning approach*. Prentice Hall.
- Watson, L. (2011). Corporate social responsibility and tax aggressiveness: An examination of unrecognized tax benefits. Working paper.
- Zimmerman, J. L. (1983). Tax and firm size. *Journal of Accounting and Economics*, 5, 119-149.

APPENDIX

KEJI Index (disclosure items)

Evaluation Criteria	Evaluation Index	Score
Financial prudence (CSR1)	Prudence of organization of shareholders	12
	Prudence of Investment	3
	Prudence of financing	10
	Tax evasion	-
Fairness and transparency (CSR2)	Fairness	5
	Transparency	8
	Cooperative relation	2
	Holding stakes of press and financial institutions	-
Social services (CSR3)	Protection of the neglected	6
	Contribution to society	4
Consumer protection (CSR4)	Consumer right protection	5
	Product quality	3
	Advertisement	2
Protection of environments (CSR5)	Effort to environmental improvement	7
	Being environmental-friendly	3
	Violation and pollution records	5
Satisfaction of employees (CSR6)	Health care and Security in Work places	2
	Investment on human capital	4
	Wages and employment welfare	4
	Labor relations	2
	Sex discrimination	3
	Cooperation of labor and managers	-
Contributions to economic development (CSR7)	Research and development (R&D)	3
	Management performance and contributions to economic development	7
Total (KEJI)		100