세무와회계저널
제14권 제4호 2013년 8월 pp.101~121
한국세무학회

Transparency of Financial Reporting of Korean Chaebol*

-Control-Ownership Disparity and Book-Tax Income Differences-

Bong Geul Chun** · Sang Wook Lee***

<Abstract>

In the case of Korea, the control-ownership disparity is very high as large corporations appropriate the necessary funds from outside. This study has practically analyzed in various ways whether or not the control-ownership disparity influences the transparency of financial reporting as well as book-tax income differences by using the business unit data of Korea for the period of 2004~2007. The results have yielded a conflicting finding in terms of the status depending on whether or not the control-ownership disparity exceeds 50%. In the group with more than 50% of control-ownership disparity, we could see that the impact on the transparency of financial reporting due to the control-ownership disparity seemed to vary with the listing status of the corporation.

<Key words> Control-ownership disparity, Book-tax income differences, Transparency of financial reporting, Corporate governance

---

* This work is supported by the Korea Sanhak Foundation 2012 Research Fund.

** Associate Professor, Department of Economics, University of Seoul, bonggeul@gmail.com, First author

*** Assistant Professor, Department of Business Administration, Seoul National University of Science and Technology, leesw@seoultech.ac.kr, Corresponding author

논문접수일 2013년 4월 29일　　1차수정일 2013년 7월 9일　　게재확정일 2013년 7월 24일

Ⅰ. Introduction

Book income and tax income differ with regard to the method of estimation owing to differences in the reporting purpose.[1] Other than differences in the estimation method, the book-tax income differences can be magnified or reduced by several other factors. First, the book-tax reporting difference can increase when the corporation reduces its tax expenses. The book-tax income difference also can increase by the cutting of non-tax costs.[2] Furthermore, the book-tax income difference can be reduced to avoid the burden of tax investigation costs : tax authorities can use the book-tax reporting differences as a preliminary decision-making tool for corporate tax investigation.[3] Hence, the reason for book-tax income differences is seen as being closely related to the control-ownership disparity of corporations. When the control-ownership disparity has a strong impact in either the over-estimation of book income or the reduction of tax costs, the book-tax reporting differences can increase. Contrarily, when the corporation has a strong motive to under-estimate in accordance with the control-ownership disparity, the book-tax reporting differences can reduce.

Meanwhile, there may be several reasons why corporations try to adjust the book income level, that is, the degree of non-transparency in the book reporting of corporations. Corporations tend to over-estimate the book income in order to smooth the fund-raising process in the capital market or borrow money more easily from financial institutions such as banks. However, corporations have a motive to under-estimate the book income in order to cut the costs related to various regulations, e.g., those pertaining to tax expenses. The transparency of such book reporting has been reported as holding a close relationship with the control-ownership disparity of corporations (Dhaliwal et al., 1982 ; Warfield et al., 1995 ; Fan and Wong, 2001). Accordingly,

---

1) The book income is estimated according to accrual-based accounting standards. On the other hand, the tax income follows the settlement principle of claims and obligations in order to figure out the taxable income according to the tax law. Also, the book income recognizes the profit and loss from the market valuation of assets. However, the tax income ignores the profit and loss from the market valuation of assets.

2) Companies try to favorably maintain the book income in order to reduce the cost of funding from the capital market or take a loan with ease from financial institutions. Accordingly, when the book income is over-estimated relative to the tax income, the book-tax income difference can further increase.

3) Mills (1998) has reported that the possibility of tax investigation can increase under large book-tax income differences. Therefore, in order to reduce the possibility of tax investigation, companies may try not to expand the book-tax income difference as much as possible.

by using business-unit data of Korea, this study intends to analyze in detail how the control-ownership disparity of a corporation influences the transparency of financial reporting and the book-tax income difference.

In the case of Korea, the control-ownership disparity[4] is very high as large corporations, under fast economic growth, appropriate the necessary funds from outside. Especially as family-oriented corporation management (Korean Chaebol) is generalized, the control-ownership disparity concerning large corporate groups has risen to a considerably high level.[5] Accordingly, the business-unit data of Korea are very useful in analyzing the impact of the control-ownership disparity on the transparency of financial reporting and book-tax income differences. However, it is difficult to find an existing study that has analyzed the impact of control-ownership disparity on the transparency of financial reporting and book-tax reporting differences. Especially, the existing studies related to control-ownership disparity have a drawback in that they have arbitrarily calculated the disparity.[6] This study performs the analysis by using a reliable source for the control-ownership disparity, which was published by the Fair Trade Commission of Korea.

Also, in order to verify the impact of the disparity on the transparency of financial reporting (earnings management) and book-tax income differences, this study has attempted to perform an in-depth analysis. It conducts the analysis for all samples. Then, by classifying the sample in terms of whether or not the control-ownership disparity exceeds 50%,[7] this study has attempted

---

4) The control-ownership disparity refers to the difference between the ownership rights and voting rights of a large corporate group family. The control-ownership disparity represents the voting rights to exercise more than the share actually owned by the head of a big company.

5) The control-ownership disparity of large corporate groups, published by the Korea Fair Trade Commission as of April 2007, was 31.28%. On the other hand, the voting right leverage index has appeared to be 6.68 ; this index refers to the ratio of voting rights to ownership rights. This tells how many times the voting rights can be exercised compared to the ownership rights. The control-ownership disparity and voting right leverage index of corporate groups were far higher for unlisted companies than for listed companies. In other words, the control-ownership disparity and voting right leverage index in the case of listed companies have appeared to be 22.56% and 8.15, respectively. However, in the case of unlisted companies, they have appeared to be 54.97% and 45.55, respectively.

6) The method of measuring control-ownership disparity used previously in prior literature relating to control-ownership disparity has been criticized. Therefore, in order to find a more accurate basis for the issue of control-ownership disparity, it is necessary to diagnose the control structure problem of Korea by using the "control-ownership disparity" data published by the government (Fair Trade Commission).

7) The control-ownership disparity of 50% refers to a level where it is possible to control a company practically without holding a share. Therefore, in the section relating to control-ownership disparities of

to analyze the transparency of financial reporting and book-tax income differences in accordance with the control-ownership disparity. Also, this study has tried to analyze the transparency of financial reporting and book-tax income differences in relation to the control-ownership disparity and the listing status of the corporation.

This study has examined companies for which the control-ownership disparity was published by the Fair Trade Commission of Korea for the period of 2004~2007. Of these, this study has targeted those companies for which it is possible to obtain the related financial statements and control-ownership structure data from the database of the Korea Investors Service Co., Ltd. (KIS).

Following the introduction, Section Ⅱ introduces the extant literature. Section Ⅲ explains the method and data of this study. Section Ⅳ introduces the results of empirical analysis. Lastly, Section Ⅴ presents recommendations and concludes this paper.

Ⅱ. Related Literature

An increase in the control-ownership disparity refers to a rise in the actual control rights of the corporation as compared to the ownership, which is referred to as the cash flow rights. As the book income increases, the cash flow rights of shareholders will increase. Meanwhile, the largest shareholder of the corporation may try to reduce — as much as possible — the cash flow rights from the perspective of the book income as well as the outflow of corporate resources. However, from the perspective of the largest shareholder, the cash flow rights in terms of the book income may belong to the largest shareholder, but the tax flows out of the company is not returned to the largest shareholder.[8)]

Accordingly as the control-ownership disparity increases, the reduction in the reporting of tax income as compared to the book income will appear to be relatively large and the book-tax income difference will increase. Meanwhile, Joh (2003) has reported that corporations that are high in control-ownership disparity are low in profitability. Therefore, companies that have excessively high control-ownership disparity are likely to report the book income excessively to

over 50%, an increase in the control-ownership disparity may not have much additional effect from the perspective of practical control.

8) The tax rate tends to be higher than the dividend payout ratio (dividends/net income). While the marginal corporate tax rate of Korean companies was 27.5% in 2009, the average dividend payout ratio based on listed companies was about 18%.

hide the deterioration in corporate profitability from the increase in the control-ownership disparity. Likewise, when there is a motive behind the over-estimation of book income from an increase in the control-ownership disparity, the book-tax income difference in connection with the motive of reducing the tax income is expected to increase.

The transparency of corporate financial reporting has been reported as being closely related to the control-ownership structure of corporations. Dhaliwal et al. (1982) have performed an analysis of the corporate control-ownership structure and selection of the corporate book keeping method. According to the results of their analysis, companies that are controlled by management tend to report the book income excessively by distributing the depreciation costs over a relatively long period of time as compared to those controlled by the owner.

Warfield et al. (1995) have analyzed the impact of corporate ownership and control separation on the magnitude of discretionary accruals. According to their study results, the share of management has appeared to be closely related to the book income. As the share of management decreases, the size of earnings management in accounting tends to increase.

Using companies in six countries in East Asia, Fan and Wong (2001) have compared and analyzed the impact of the control-ownership structure on book data. They first examined whether the largest shareholder uses the book income report in the pursuit of private interests through a concentrated ownership structure. When there is a pursuit of private interests by the largest shareholder, the wealth of minority shareholders may decrease and a loss in the reliability of accounting data can be expected (the entrenchment effect). Since the information exposure of a specific company can be limited due to the pursuit of ownership owing to the concentration of the ownership structure, the usefulness of accounting data may be reduced (the information effect). According to the results of analysis, the usefulness of accounting data decreases along with an increase in the share of the largest shareholder. Also, as the disparity between ownership and control increases, the usefulness of accounting data decreases.

Tax authorities can use the book-tax reporting differences as the preliminary decision-making tool for investigating corporate taxes. By using tax-investigation data (confidential data), Mills (1998) has verified that the possibility of adjustment by tax authorities actually increases as the book income greatly exceeds the tax income. Also, Mills and Sansing (2000) have reported that the book-tax income differences significantly impact upon the probability of tax investigations and additional tax payments. They argue that the government reviews differences between the book and tax incomes.

Meanwhile, the book income adjustment and book-tax income differences of corporations are found to exhibit a certain relationship. Phillips et al. (2003) have analyzed the income adjustment and book-tax income reporting differences. They note that a temporary difference may occur between the book and tax incomes when management has adjusted the book income. Joo et al. (2005) have evaluated the usefulness of book-tax income differences as a measure of earnings management. They have investigated whether or not their measure of book-tax income differences has any additional usefulness in ascertaining the behavior of earnings management as compared to the accrual-related measure. They consider their measure usable for earnings management when management raises the level of book income, since the result is reflected in the book-tax income differences.

On the other hand, Mills and Newberry (2001) have reported that the book-tax income differences are influenced by the listing status of corporations. They assert that listed companies tend to favorably show the book income in order to cut the costs of funding from the capital market ; therefore, the book-tax income differences increase. However, when regulations on the public disclosure of corporate information from being listed are reinforced, the need to over-estimate the book income may increase. As a result of such need, unlisted companies may be likely to reduce the over-estimation of book income. Therefore, it is expected that the impact on the book-tax income differences of an increase in the control-ownership disparity, in relation to the level of control-ownership disparity, can differ in terms of the listing status of the corporation.

Ⅲ. Research Method and Model

1. Data

This study analyzes the impact of control-ownership disparity on the transparency of financial reporting and book-tax income differences in various situations. First, together with an analysis of the entire sample, this study analyzes the sample by classifying corporations in terms of whether or not the control-ownership disparity exceeds 50%. When the control-ownership disparity exceeds 50%, the shareholder can actually control the company without nominally holding a share.

Accordingly, the results may qualitatively differ depending on whether or not the control-ownership disparity exceeds a certain level (i.e., 50%), in which case the company is practically controlled. When the control-ownership disparity is low, the positive effect[9)] from an increase in the control-ownership disparity (for example, the entrenchment and information effects) can be larger than the negative effect. Accordingly, an increase in the control-ownership disparity may have a close relationship with the transparency of financial reporting and book-tax income differences. Next, this study intends to analyze the impact of the control-ownership disparity on the transparency of financial reporting and book-tax income differences according to the status of listed vs. unlisted.

In order to conduct this analysis, this study has used the companies belonging to the corporate group in the data on control-ownership disparity published by the Fair Trade Commission during the period of 2004~2007. Using these companies, this study has organized the sample data that can be obtained through the KIS-value DB[10] provided by the Korea Investors Service Co., Ltd. (KIS).[11]

〈Table 1〉 Sample structure

	Below 50% in terms of the control-ownership disparity	50% or more in terms of the control-ownership disparity	Total
Unlisted	376	543	919
Listed	376	62	438
Overall	752	605	1,357

2. Empirical Model

This study has set the following model in order to analyze the impact of control-ownership disparity on the transparency of financial reporting and book-tax income differences. Expression (1) analyzes the impact of control-ownership disparity on the transparency of financial reporting.

9) As for the positive effect, this tells that the convergence of interests between owner managers and outsiders increases as the agent cost reduces from an increase in the actual share. The average control-ownership disparity for the sample was 0.47, and the median was 0.46. We divided the sample based on a cutoff level of 46% for control-ownership disparity but found similar results.

10) The KIS-value has secured the financial information of all the companies within Korea that have received an external audit. The companies that have to receive an external audit include ① limited-liability companies with total assets of no less than 10 billion KRW, ② limited-liability companies with either total liabilities of no less than 7 billion KRW or no less than 300 employees and total assets of no less than 7 billion KRW, and ③ listed companies.

11) In order to control the impact of outliers, this study has winsorized the results on the basis of the top and bottom 1% for each variable.

Expression (2) analyzes the impact of control-ownership disparity on book-tax income differences.

$$Dev_{i,t} = \beta_0 + Z_{i,t}\gamma + \epsilon_{i,t} \tag{1}$$

$$Diff_{i,t} = \beta_0 + Z_{i,t}\gamma + \epsilon_{i,t} \tag{2}$$

For financial information transparency in the following model, viz., (1), Kothari et al. (2005) have used performance-matched discretionary accruals (Dev) as a substitute for corporate earnings management. Performance-matched discretionary accruals refer to earnings management in corporate financial reporting. When these accruals are positive, the book income is over-estimated ; when they are negative, the book value is under-estimated. More precisely, performance-matched discretionary accruals refer to the non-transparency of financial reporting.

In order to estimate the performance-matched discretionary accruals, it is necessary to first calculate the accruals of an individual company. The accruals of an individual company are calculated by using the Jones model (Dechow et al., 1995) as in the following.

$$DA_{i,t} = \frac{TAC_{i,t}}{A_{i,t-1}} - [\alpha_0(1/A_{i,t-1}) + \alpha_1(\triangle REV_{i,t} - \triangle AR_{i,t})/A_{i,t-1} + \alpha_2(PPE_{i,t}/A_{i,t-1})]$$

$DA_{i,t}$: Discretionary accruals at year t of company i
$TAC_{i,t}$: Total accruals at year t of company i
$A_{i,t-1}$: Total assets at $t-1$ of company i
$\triangle REV_{i,t}$: Sales increase at year t of company i
$\triangle AR_{i,t}$: Increase in the receivables from sales at year t of company i
$PPE_{i,t}$: Tangible assets at year t of company i
$\alpha_0, \alpha_1, \alpha_2$: Regression coefficients of the corresponding variables estimated by year and by industry

We deduct the accrual of the corresponding company from the individual company accrual calculated earlier. As for the selection of the corresponding company, this study has chosen a company similar to the sample company based on management performance in the previous year. More concretely, the corresponding company is a company that is similar in terms of the return on assets (ROA) in the previous year. In order to identify the corresponding company, we first divide the candidates for the corresponding company into five groups according to the size of ROA in the previous year ($t-1$). From the groups developed in this way, the average accruals in the year (t) of the group closest to the ROA of the group is defined as the accrual of the corresponding sample. From here on, the performance-matched discretionary accruals is referred to as accrual for the sake of convenience.

First, the book-tax income differences ($Diff$) of Model (1) were estimated by deducting the taxable income[12)] from the income before income taxes on the income statement in accordance with corporate accounting standards.

On the other hand, i and t in Models (1) and (2) refer to the company and year, respectively, and Z is the vector of the control-ownership disparity ($diff$), listing-status dummy ($stock$), and control variables. Therefore, Z includes the following control variables in addition to the control-ownership disparity ($diff$)[13)] and listing-status dummy ($stock$) that can influence the accruals (Dev) and book-tax income differences ($Diff$).

As for control variables, this study has used information such as the corporate size ($size$), sales growth ($sales$), debt ratio ($debt$), previous-year deficit dummy ($lossdm$), accounting audit Big-4 dummy ($audidm$), and year dummy ($Year$). The corporate size ($size$) was estimated by the logarithmic value of the total assets.

Watts and Zimmerman (1978) have reported that financial reporting shows differences by company size since large companies are politically more sensitive than small/medium-sized companies. As a substitute variable for the political impact on financial reporting, they selected company size ($size$). The sales growth in any year is measured relative to the preceding year. This variable was selected to control the possibility that book-tax reporting can be influenced by corporate growth. The debt ratio as an index for representing the financial stability of corporations makes use of both debt and equity. Sweeny (1994) has argued that a company may vary the book selection and earnings management in accordance with its debt contract. In order to control variables such as the possibility of adjustment of book-tax reporting according to the debt status of the corporation, this study has selected the debt ratio as a control variable. As for the previous year's deficit dummy ($lossdm$), '1' was selected when the company showed a deficit in the previous year ('0' in case there was no deficit). Burgstahler and Dichev (1997) have considered that companies up-scale their incomes in order to avoid deficits. In order to control the

12) As for corporate tax rates in 2004, 16.5% was applied for the standard of assessment of no more than 100 million KRW and 29.7% for the standard of assessment of more than 100 million KRW. For the period of 2005~2007, 14.3% and 27.5%, respectively, were applied for the standard of assessment of no more than 100 million KRW and the standard of assessment of more than 100 million KRW.

13) The control-ownership disparity can have a nonlinear impact on corporate performance. Therefore, the square of the control-ownership disparity can be added as an independent variable. However, since the correlation between the control-ownership disparity and the square of the control-ownership disparity was 0.95, this study did not include both as independent variables.

possibility of the over-estimation of book income that can occur in the process when a deficit company in the previous year switches into a surplus company or is reducing its deficit in the present year, this study has selected the previous year's deficit dummy ($lossdm$) as a control variable. The accounting audit firm dummy ($auditdm$) was assigned '1' if the company was audited by a big audit firm and '0' otherwise. Becker et al. (1985) have reported that corporations that are audited by big audit firms reveal more earnings management compared to those that are not audited by big audit firms. In order to control the impact of auditing by big audit firms on the quality of financial reporting, this study has selected the accounting audit firm dummy ($auditdm$) as the control variable.14) Additionally, in order to control the effect by year, the year dummy was included as a control variable.

Also, since the data are constructed in panel form, this study has performed the analysis by applying the random-effects model that can control the unpredictable individual characteristics of companies.15)

〈Table 2〉 Variables in the model

Variable	Description
Book-tax income differences ($Diff$)	(Income on the income statement-taxable income)/total assets
Control-ownership disparity ($diff$)	"Voting rights-ownership rights" disparity of companies belonging to large corporate groups, as published by the Korea Fair Trade Commission
Dummy for the status of listed or unlisted ($stock$)	Dummy is '1' for listed and '0' for unlisted
Company size ($size$)	Logarithmic value of the total assets
Sales growth ($sale$)	Sales growth as compared to the previous year
Debt ratio ($debt$)	Debt/equity
Deficit dummy ($lossdm$)	Dummy is '1' for previous-year deficit and '0' otherwise
Big-4 dummy ($auditdm$)	Dummy is '1' for accounting audit by Big-4 and '0' otherwise
Year dummy ($year$)	Dummy is '1' for the corresponding year and '0' otherwise

14) In Korea, Samil, Samjung, Anjin, and Hanyoung are considered as the Big-4 audit firms.

15) Considering that the group, N, is quite large but the period for analysis, T, is not very large, this study has not used the fixed-effects model.

Ⅳ. Results of Empirical Analysis

1. Using the Entire Sample

By using the entire sample, as shown in <Table 3>, this study has obtained the results of regression analysis for the relationship between control-ownership disparity and the non-transparency of financial reporting, and the relationship between control-ownership disparity and book-tax income differences. The estimated coefficient of control-ownership disparity for the non-transparency of financial reporting (discretionary accruals) is not significant, and the impact of control-ownership disparity on accruals does not vary significantly with the listing status of the company. However, the estimated coefficient of control-ownership disparity for the book-tax income differences is positive at a significant level. The impact of control-ownership disparity on the book-tax income differences does not vary significantly with the listing status.

〈Table 3〉 Empirical results (entire sample).

	Discretionary accruals				Book-tax income differences			
	Coef.	P>|z|	Coef.	P>|z|	Coef.	P>|z|	Coef.	P>|z|
$diff$	**0.006**	**(0.721)**	**0.003**	**(0.897)**	**0.985**	**(0.000)*** **	**0.985**	**(0.000)*** **
$stock$	–	–	**−0.015**	**(0.546)**	–	–	**−0.001**	**(0.957)**
$diff^{*}\ stock$	–	–	**−0.030**	**(0.568)**	–	–	**−0.011**	**(0.661)**
$size$	0.010	(0.003)***	0.013	(0.001)***	0.002	(0.261)	0.003	(0.231)
$sale$	−0.026	(0.185)	−0.027	(0.179)	−0.020	(0.004)***	−0.020	(0.004)***
$debt$	0.011	(0.002)***	0.010	(0.006)***	0.004	(0.042)**	0.004	(0.050)***
$lossdm$	0.115	(0.000)***	0.119	(0.000)***	−0.100	(0.000)***	−0.100	(0.000)***
$auditdm$	−0.012	(0.429)	−0.013	(0.395)	−0.005	(0.421)	−0.006	(0.402)
$year$	Included							
$Within-R^2$	0.012		0.012		0.759		0.759	
No. of Obser.	1,357							

Note : p-values in parentheses.
***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

According to the result of analysis that targets the entire sample, an increase in the control-ownership disparity does not significantly impact on the financial reporting of corporations. However, it is assumed that an increase in the control-ownership disparity has a significant impact on the increase in book-tax income differences. While the book-tax income differences in the entire sample increase due to the increased control-ownership disparity, we assume that this result is not related to the over-estimation of the book income. Accordingly, it is assumed that an increase in the book-tax income differences from an increase in the control-ownership disparity is more related to a reduction in the tax income rather than an increase in the book income. An increase in the motive to reduce the outflow of corporate resources such as tax from an increase in the actual control rights of the company (as compared to the share of ownership) can be interpreted as increasing the book-tax income differences.

2. The Case of 50% or Less of Control-Ownership Disparity

Under 50% or less of the control-ownership disparity, as shown in <Table 4>, this study has obtained the results of regression analysis for the relationship between control-ownership disparity and the non-transparency of financial reporting, and the relationship between control-ownership disparity and book-tax income differences while using the entire sample. The estimated coefficient of control-ownership disparity for the non-transparency of financial reporting (discretionary accruals) is negative at a significant level. However, the impact of control-ownership disparity on the non-transparency of financial reporting (discretionary accruals) does not vary significantly with the listing status. Meanwhile, the estimated coefficient of control-ownership disparity for the book-tax income differences is positive at a significant level. However, the impact of the control-ownership disparity on the book-tax income differences does not vary significantly with the listing status.

When the control-ownership disparity is no more than 50%, it is assumed that an increase in the control-ownership disparity has a significant impact on the increase in book-tax income differences and under-estimation of the corporate book income. It can be assumed that the motive to reduce the outflow of corporate resources such as dividends from an increase in the actual control rights of the company (as compared to the share of ownership) can aggravate the under-estimation of the book income. Accordingly, it is assumed that an increase in the book-tax income differences from an increase in the control-ownership disparity is not quite related to the over-estimation. It is assumed that the increase in the book-tax income differences from an increase in the control-ownership disparity is more related to the under-estimation of the tax income for the sake of tax savings rather than the over-estimation of book income.[16)]

〈Table 4〉 Empirical results (disparity at most 50%)

	Discretionary accruals				Book-tax income differences			
	Coef.	P>|z|	Coef.	P>|z|	Coef.	P>|z|	Coef.	P>|z|
$diff$	**−0.119**	**(0.008)***	**−0.166**	**(0.003)***	**0.988**	**(0.000)***	**0.984**	**(0.000)***
$stock$	−	−	**−0.053**	**(0.073)***	−	−	**0.001**	**(0.854)**
$diff* stock$	−	−	**0.147**	**(0.117)**	−	−	**0.009**	**(0.559)**
$size$	0.009	(0.056)*	0.012	(0.031)**	0.001	(0.184)	0.001	(0.511)
$sale$	−0.042	(0.135)	−0.041	(0.136)	−0.001	(0.787)	−0.001	(0.806)
$debt$	0.007	(0.189)	0.006	(0.262)	0.001	(0.411)	0.001	(0.386)
$lossdm$	0.058	(0.146)	0.058	(0.143)	−0.059	(0.000)***	−0.060	(0.000)***
$auditdm$	−0.011	(0.609)	−0.010	(0.644)	−0.004	(0.315)	−0.003	(0.341)
$year$	Included							
$Within-R^2$	0.01		0.01		0.702		0.702	
No. of Obser.	752							

Note : p-values in parentheses.
***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

3. The Case of More than 50% of Control-Ownership Disparity

Under more than 50% of the control-ownership disparity, as shown in <Table 5>, this study has obtained the results of regression analysis for the relationship between control-ownership disparity and the non-transparency of financial reporting (discretionary accruals), and the relationship between control-ownership disparity and book-tax income differences while using the entire sample. The estimated coefficient of control-ownership disparity for the non-transparency of financial reporting (discretionary accruals) is positive at a significant level. Regarding the listing status, the estimated coefficient of the interaction term (listing dummy *

16) Despite the under-estimation of the book income, the book-tax income differences were rather increased due to the increase in the control-ownership disparity. Therefore, it is assumed that a reduction in the tax income has a larger impact on the book-tax income differences than the under-estimation of the book income.

control-ownership disparity) is negative at a significant level. Meanwhile, the estimated coefficient of control-ownership disparity for the book-tax income differences is positive at a significant level. However, the impact of the control-ownership disparity on the book-tax income differences does not vary significantly with the listing status.

When the control-ownership disparity exceeds 50%, it is assumed that the over-estimation of book income arises from an increase in the control-ownership disparity in order to hide the negative impact on the management of the company. However, this over-estimation of the book income from an increase in the control-ownership disparity occurs primarily in the books of unlisted companies, and the over-estimation of book income was comparatively greatly reduced in the case of listed companies. On the other hand, in the case when the control-ownership disparity is more than 50%, it is assumed that the book-tax income differences rather increase from an increase in the control-ownership disparity.

〈Table 5〉 Empirical results (disparity above 50%).

	Discretionary accruals				Book-tax income differences			
	Coef.	P>|z|	Coef.	P>|z|	Coef.	P>|z|	Coef.	P>|z|
$diff$	**0.111**	**(0.014)****	**0.128**	**(0.008)*****	**1.007**	**(0.000)*****	**0.998**	**(0.000)*****
$stock$	–	–	**0.239**	**(0.082)***	–	–	**0.030**	**(0.734)**
$diff$* $stock$	–	–	**0.378**	**(0.070)***	–	–	**0.022**	**(0.863)**
$size$	0.017	(0.006)***	0.016	(0.012)**	0.004	(0.412)	0.005	(0.321)
$sale$	−0.008	(0.773)	−0.007	(0.808)	−0.041	(0.002)***	−0.041	(0.002)***
$debt$	0.011	(0.056)*	0.012	(0.044)**	0.006	(0.080)*	0.006	(0.092)*
$lossdm$	0.160	(0.000)***	0.163	(0.000)***	−0.134	(0.000)***	−0.133	(0.000)***
$auditdm$	−0.012	(0.580)	−0.011	(0.614)	−0.010	(0.436)	−0.011	(0.408)
$year$	Included							
$Within-R^2$	0.011		0.013		0.257		0.257	
No. of Obser.	605							

Note : p-values in parentheses.

***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

However, the impact of the control-ownership disparity on the increase in the book-tax income differences does not vary significantly with the listing status. In the case when the control-ownership disparity is more than 50%, it is assumed that the expansion of book-tax income differences from an increase in the control-ownership disparity is closely related to the over-estimation of the book income at a certain level.[17)]

Ⅴ. Concluding Remarks

This study has empirically analyzed in various ways whether the control-ownership disparity affects the transparency of corporate financial reporting and book-tax income differences. In order to achieve this, we have used the "Control-Ownership Disparity" data of large companies published by the Fair Trade Commission of Korea. In order to measure the transparency of financial reporting, this study has calculated the discretionary accruals and estimated the differences between the book income and tax income by deducting the income that is subject to the calculation of the corporate tax imposition.

According to the results of analysis, the impact of control-ownership disparity on the transparency of financial reporting (discretionary accruals) was found to be insignificant. However, there is a conflicting result concerning whether or not the control-ownership disparity exceeds 50%. While an increase in the control-ownership disparity — as long as the control-ownership disparity is 50% or less — raises the under-estimation of the book income, an increase in the control-ownership disparity beyond 50% tends to cause over-estimation of the book income. In the group with more than 50% of control-ownership disparity, we could see that the impact of the control-ownership disparity on the transparency of financial reporting appeared to vary with the listing status of the corporation. While we could find that the unlisted group tended to over-estimate the book income in accordance with the control-ownership disparity, when the control-ownership disparity exceeded 50%, the tendency to over-estimate the book income was significantly reduced in the listed group.

It is assumed that the impact of an increase in the control-ownership disparity on the transparency of corporate financial reporting differs by the level of the control-ownership

17) It is assumed that the increase in the book-tax income difference from an increase in the control-ownership disparity is also influenced by a reduction in the tax income in addition to the over-estimation of the book income. The comparison of unlisted and listed firms has revealed a reduction in the over-estimation of the book income from an increase in the control-ownership disparity.

disparity. When the control-ownership disparity was no more than 50%, we could infer a motive to reduce the outflow of corporate resources through the under-estimation of the book income. However, when the control-ownership disparity exceeds 50%, we infer that the possible motive to over-estimate the book income given an increase in the control-ownership disparity may be to conceal poor management performance. However, in the case of the listed group, we could interpret that the over-estimation of the book income is not easy due to the enhancement of the external monitoring function.

Meanwhile, the increase in the book-tax income differences due to an increase in the control-ownership disparity has appeared to be identical in all the analyses. However, while presuming the cause of book-tax income differences from an increase in the control-ownership disparity, we could see a difference depending on whether the analysis was performed for the entire sample or only those corporations for which the control-ownership disparity exceeded the 50% level. Regarding the analysis of the sample of companies with no more than 50% of the control-ownership disparity, the increase in the book-tax income differences from an increase in the control-ownership disparity has appeared to be closely related to the reduction in tax income for the adjustment of tax expenses rather than the over-estimation of book income. However, in the case when the control-ownership disparity exceeds 50%, it is assumed that the increase in the book-tax income differences from an increase in the control-ownership disparity seems to be related to the over-estimation of the book income in part.

This result of empirical analysis raises an interesting issue for us. It tells that the impact of the control-ownership structure of a company on the transparency of financial information can yield varying results depending on the control structure. Also, an increase in the control-ownership disparity causes a difference in the book-tax income and this could vary with the control structure.

This study has performed various analyses by using Korean company data that show a high level of control-ownership disparity. However, no cause other than the over-estimation of book income was presented that could influence the increase in the book-tax income differences due to the control-ownership disparity. Also, the data for theoretical analysis of the transparency of financial reporting and increase in book-tax income differences in relation to the control-ownership disparity are not sufficient. Hence, we judge that it may be necessary to find a theoretical model for analysis that can explain these empirical results well.

References

Becker, C., M. Defond, J. Jiambalvo, and K. Subramanyam. 1998. The effect of Audit Quality on Earnings Management. *Contemporary Accounting Research* 15 : 1－24.

Burgstahler, D.C., and I. Dichev. 1997. Earnings Management to avoid Earnings Decreases and Losss. *Journal of Accounting and Economics* 24 : 99－126.

Dechow, P., Sloan, R. and Sweeney, A. 1995. Detecting Earnings Management. *Accounting Review* 70 : 193－225.

Dhaliwal D. S., G. L. Salamon, E. D. Smith. 1982. The Effect of Owner versus Management Control on the Choice of Accounting Methods. *Journal of Accounting and Economics* 4 : 41－53.

Fan, J. P. H., and T. J. Wong. 2001. Corporate Ownership Structure and the Informativeness of Accounting Earnings in East Asia. Working paper, Honkong University of Science and Technology.

Joh, Sung Wook. 2003. Corporate Governance and Firm Profitability : Evidence from Korea before the Economic Crisis. *Journal of the Financial Economics* 68 : 287－322.

Jones, J. 1991. Earnings Management during Import Relief Investigation. *Journal of Accounting Research* 29 : 193－228.

Joo, I. K, W. Choi, and J. I. Yum. 2005. A Study on the Usefulness of Book－Tax Differences as a Metric for detecting Earnings Management. *Korean Accounting Review* 30 : 237－275.

Kothari, S., Leone, A. and Wasley, C. 2005. Performance matched Discretionary accrual Measure. *Journal of Accounting and Economics* 39 : 163－197.

Lee, H. J., H. U. Jung. and K. T. Lee. 2013. The effect of ownership wedge on effective tax rates. *Journal of Taxation and Accounting* 14(1) : 9－30.

Mills, L. 1998. Book－tax Difference and Internal Revenue Service Adjustments. *Journal of Accounting Reviews* 36 : 343－356.

Mills, L. F. and K. J. Newberry. 2001. The Influence of Tax and Nontax Costs on Book-Tax Reporting Differences : Public and Private Firms. *Journal of American Taxation Accounting* 23 : 1－19.

Mills, L., and R. Sansing. 2000. Strategic Tax and Financial Reporting Decision : Theory and Evidence. *Contemporary Accounting Research* 17 : 85－106.

Park, J. H. and N. P. Sung, 2012. Study on difference inoperational risks among business conglomerates, non-chaebol family-owned business and other business. *Journal of Taxation and Accounting* 13(4) : 9－31.

Phillps, J., M. Pincus, and S. Rego. 2003. Earnings Management : New Evidence Based on Deferred Tax Expense. *Accounting Review* 78 : 491－521.

Sweeny, A. 1994. Debt－covenant Violations and Managers Accounting Responses. *Jounrnal of Accounting and Economic*s 17 : 281－308.

Song, H. J., 2012. The quality of earnings and auditor－Tenure. *Journal of Taxation and Accounting* 13(2) : 49－68.

Warfield, T. D., J. J. Wild, and K. L. Wild. 1995. Managerial Ownership, Accounting Choices, and Informativeness of Earnings. *Journal of Accounting and Economics* 20 : 61－91.

Watts, R. and J. Zimmerman. 1978. Towards a Positive Theory of the Determination of Accounting Standards. *Accounting Review* 53(1) : 112－134.

한국재벌의 회계보고 투명성*

-소유지배괴리도와 회계-세무이익 차이를 중심으로-

전봉걸** · 이상욱***

<요 약>

회계이익과 세무이익의 차이는 산정 방식 이외에도 여러 요인들에 의해 확대 또는 축소될 수 있다. 특히 회계·세무이익의 차이를 유발하는 동기는 기업의 소유 지배구조와 밀접한 관련을 가질 것으로 판단된다. 한국의 경우 빠른 경제성장하에서 대기업이 필요자본을 외부에서 충당하고 가족기업 경영이 일반화되어 있어 기업의 소유지배괴리도가 매우 높다. 본 연구는 2004~2007년중 한국의 기업단위 데이터를 활용하여 소유지배괴리도가 회계보고 투명성, 회계 세무이익 차이에 어떻게 영향을 주는지 다양한 방법으로 실증분석하였다. 먼저 전체 표본, 그리고 소유지배괴리도 50% 초과 여부로 구분하여 분석하고 또한 상장 및 비상장 여부에 따른 관계의 차이도 분석하였다. 분석결과 소유지배괴리도가 회계보고 투명성(재량발생액)에 미치는 영향은 전체 표본에서는 유의하지 않았으나, 소유지배괴리도 50% 초과여부에 따라 서로 상반된 결과를 보였다. 또한 소유지배괴리도 50% 초과에서는 소유지배괴리도가 회계보고 투명성에 미치는 영향이 기업의 상장 여부에 따라 다르게 나타났다. 한편 소유지배괴리도는 회계 세무이익 차이를 확대 시키는 것으로 나타났으나, 소유지배 괴리도 50% 초과여부, 상장 여부에 따라 차이는 발견되지 않았다.

<주제어> 소유지배괴리도, 회계세무차이, 회계보고의 투명성, 기업지배구조

* 이 연구는 한국산학협동재단 2012년 학술지원사업에 의해 수행되었습니다.
** 서울시립대학교 경제학과 부교수, bonggeul@gmail.com, 02-2210-5757, 제1저자
*** 서울과학기술대학교 글로벌경영학과 조교수, leesw@seoultech.ac.kr, 02-970-6439, 교신저자

Appendices

〈Table 1〉 Descriptive statistics

		Average	Median	S.D.	No. of Obser.
Entire Sample	Dev	−0.074	−0.068	0.204	1,357
	$Diff$	0.472	0.473	0.351	
	$diff$	0.480	0.488	0.348	
	$size$	20.801	19.793	3.590	
	$sale$	0.138	0.049	0.292	
	$debt$	1.438	0.993	1.587	
	$lossdm$	0.038	0.000	0.192	
	$auditdm$	0.810	1.000	0.393	
Disparity at most 50%	Dev	−0.074	−0.067	0.196	752
	$Diff$	0.214	0.221	0.187	
	$diff$	0.217	0.229	0.186	
	$size$	21.166	20.402	3.562	
	$sale$	0.122	0.047	0.271	
	$debt$	1.332	0.874	1.605	
	$lossdm$	0.032	0.000	0.176	
	$auditdm$	0.839	1.000	0.368	
Disparity above 50%	Dev	−0.075	−0.070	0.215	605
	$Diff$	0.792	0.831	0.219	
	$diff$	0.807	0.844	0.192	
	$size$	20.348	19.070	3.577	
	$sale$	0.158	0.056	0.315	
	$debt$	1.571	1.170	1.556	
	$lossdm$	0.046	0.000	0.210	
	$auditdm$	0.774	1.000	0.419	

〈Table 2〉 Correlation matrix

		Dev	$Diff$	$diff$	$size$	$sale$	$debt$	$lossdm$
Entire Sample	$Diff$	−0.014	1					
	$diff$	−0.013	0.977	1				
	$size$	−0.018	−0.097	−0.103	1			
	$sale$	−0.014	0.049	0.060	−0.276	1		
	$debt$	0.100	0.070	0.065	−0.075	0.178	1	
	$lossdm$	0.123	−0.015	0.043	−0.022	−0.023	0.129	1
	$auditdm$	−0.006	−0.083	−0.082	0.240	−0.044	−0.084	−0.031
Disparity at most 50%	$Diff$	−0.130	1					
	$diff$	−0.140	0.984	1				
	$size$	−0.035	0.042	0.034	1			
	$sale$	−0.028	−0.012	−0.010	−0.267	1		
	$debt$	0.065	−0.100	−0.103	−0.107	0.229	1	
	$lossdm$	0.070	−0.098	−0.045	−0.021	0.013	0.055	1
	$auditdm$	−0.023	0.017	0.020	0.264	−0.050	−0.201	−0.065
Disparity above 50%	$Diff$	0.085	1					
	$diff$	0.111	0.875	1				
	$size$	0.001	−0.059	−0.073	1			
	$sale$	0.000	0.009	0.044	−0.277	1		
	$debt$	0.141	0.140	0.137	−0.017	0.115	1	
	$lossdm$	0.173	−0.062	0.089	−0.015	−0.060	0.206	1
	$auditdm$	0.011	−0.069	−0.068	0.199	−0.029	0.059	0.006