Corporate Social Responsibility and Information Effect of Future Earnings*

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＜ABSTRACT＞

This study hypothesized that Corporate Social Responsibility(Hereafter 'CSR') activities would be a positive relation with the information effects of future earnings, and empirically analyzed using the future earnings response coefficient (FERC) model of Tucker and Zarowin (2006). The hypothesis of this study is based on mixed results between CSR activity and earnings quality. The empirical results show that there is a positive relationship between CSR activity and information effects of future earnings. This is consistent with controlling the effects of the omitted variables. It is also consistent with controlling the size effect. Based on these results, CSR activities can be interpreted as enhancing the information effect of future earnings. After dividing the group into companies with good corporate governance and companies with weak corporate governance, this study additionally analyzed the effect of CSR activities on the information effect of future earnings. The results of the analysis showed that CSR activity increased the information effect of future earnings in both the group with good corporate governance and the group with weak corporate governance. Taken together, investors believe that CSR activities are positive, suggesting that CSR activities are an incentive to increase value relevance of future earnings. This study contributes to the finding that there is a complementary relationship between CSR activity and earnings quality in the mixed situation of the relationship between CSR activity and the quality of accounting information. In addition, this study is expected to provide implications that corporate social responsibility may affect stock prices. In this regard, the results of this study are expected to be useful data for investor's investment decision making and policy maker's policy making. In addition, this study contributes to the fact that Korean companies need to strategically utilize CSR activities. This study has limitations that do not measure implied CSR activity.

▶ Key Words : corporate social responsibility (Hereafter 'CSR'), earnings quality, future earnings response coefficient (FERC), information effects of future earnings, corporate governance, KEJI index

Ⅰ. Introduction

This study conducts an empirical analysis by setting the hypothesis that there would be a positive relationship between Corporate Social Responsibility (Hereafter 'CSR') activities and the information effects of future earnings. Specifically, this study analyzed the effect of CSR activities on FERC.

The information value of earnings is captured through the stock effect, which can be measured by the amount of information about future earnings reflected in current stock returns(Choi and Song 2004 ; Tucker and Zarowin 2006).[1] Therefore, previous studies related to the information effects of future earnings analyze the effect of firm-specific characteristic variables on the information effects of future earnings using Tucker and Zarowin's (2006)[2] Future Earnings Response Coefficient(Hereafter 'FERC') model.

According to the analysis results, high matching level and quality of earnings appear to act as an incentive to increase the information effect of future earnings(Kwon et al. 2012 ; Choi and Song 2004 ; Tucker and Zarowin 2006 ; Haw et al. 2012).[3] In addition, private debt ratio, the degree of competition in

1) Choi, J. S. and D. G. Song, Does Income Smoothing Make Earnings and Cash Flows More Informative?, *Study on Accounting Taxation and Auditing* 40, 2004, pp.245～262. [printed in Korean] ; Tucker, J. W. and P. A. Zarowin, Does Income Smoothing Improve Earnings Informativeness, *The Accounting Review* 81(1), 2006, pp.251～270.

2) Tucker, J. W. and P. A. Zarowin, Does Income Smoothing Improve Earnings Informativeness, *The Accounting Review* 81(1), 2006, pp.251～270.

3) Kwon. S. Y., E. S. Ki and H. Seo, The Effect of Accruals Quality on Price Informativeness, *Korean Management Review* 41(1), 2012, pp.139～169. [printed

the industry, and abnormal audit hours have been shown to be systematically related to the information effects of future earnings(Lee and Jung 2014 ; Gelb and Zarowin 2002 ; Choi et al. 2011 ; Jung and Lee 2014 ; Jung 2015 ; Jung 2016).[4)]

Prior studies have analyzed the effects of various firm-specific variables on the information effects of future earnings, but no studies have analyzed the effects of CSR activities on the information effects of future earnings. Therefore, this study empirically analyzes the relationship between CSR activity and information effects of future earnings.

In this study, empirical analysis is performed using KEJI index as a proxy for CSR activity. The results showed that CSR activities are positively related to the information effects of future earnings. This is consistent with the results including control variables. It is also consistent with controlling the size effect.

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in Korean] ; Choi, J. S. and D. G. Song, Does Income Smoothing Make Earnings and Cash Flows More Informative?, *Study on Accounting Taxation and Auditing* 40, 2004, pp.245～262. [printed in Korean] ; Tucker, J. W. and P. A. Zarowin, Does Income Smoothing Improve Earnings Informativeness, *The Accounting Review* 81(1), 2006, pp.251～270 ; Haw, I. M., B. Hu, and J. J. Lee, Investor protection and price informativeness about future earnings : international evidence, *Review of Accounting Studies* 17(2), 2012, pp.389～419.

4) Lee, H. J. and H. U. Jung, The Matching Level and Information Effect of Future Earnings, *Study on Accounting Taxation and Auditing* 60, 2014, pp.37～63. [printed in Korean] ; Gelb, D. and P. A. Zarowin, Corporate Disclosure Policy and the Informativeness of Stock Prices, *Review of Accounting Studies* 7(1), 2002, pp.33～52 ; Choi, J. H., L. A. Myers, Y. Zang and D. Ziebart, Do Management EPS forecasts allow returns to reflect future earnings? Implication for the continuation of management's quarterly earnings guidance, *Review of Accounting Studies* 16(1), 2011, pp.143～182 ; Jung, H. U. and K. I. Lee, Debt Financing and Future Earnings Response Coefficient, *Korean Corporation Management Review* 21(4), 2014, pp.41～61 [printed in Korean] ; Jung, H. U., The Effect of Competition of Market on Information Effect of Future Earnings, *Study on Accounting Taxation and Auditing* 67, 2016, pp.167～191. [printed in Korean]

Based on these results, CSR activity can be interpreted as a factor that increases value relevance.

In addition, this study divides the sample into the group with good corporate governance and the group with weak corporate governance, and additionally analyzes the effect of CSR activity on the information effect of future earnings in each group. The results of the analysis showed that CSR activity increases the information effect of future earnings in both the group with good corporate governance and the group with weak corporate governance.

Taken together, investors can interpret CSR activity as a positive factor for the stock price. Therefore, CSR activities are a positive factor for value relevance.

The share price is affected not only by current earnings, but also by future earnings. However, research related to CSR activities has focused only on the effect of CSR activities on the share price of the current period. This study is different from previous studies in that it expands existing studies and analyzes how CSR activities affect the stock price relevance of future earnings.

This study contributes to the fact that the quality of accounting information may be high for companies that perform CSR activities in the mixed situation of the relationship between CSR activity and the quality of accounting information. In addition, this study is expected to provide implications that corporate social responsibility may affect stock prices.

In this regard, the results of this study are expected to be useful data for investor's investment decision making and policy maker's policy making. In addition, this study contributes to the fact that Korean companies need to strategically utilize CSR activities.

This study is organized as follows. Chapter Ⅱ presents the preceding research and hypothesis. In Section Ⅲ, the research model and the selection of

samples were described. In Section Ⅳ, the empirical analysis results were presented. Finally, Section Ⅴ presents the results and implications of the study.

Ⅱ. Preliminary Research and Hypothesis

1. Future Earning Response Coefficient (FERC)

The Future Earning Response Coefficient (FERC) in this study is measured based on the methodology of Tucker and Zarowin (2006).[5] The methodology of Tucker and Zarowin (2006)[6] is based on below equation (1) model study of return-earnings relation by Collins et al. (1994).[7]

They explain that current stock returns are based on market expectations for current unexpected earnings and future earnings. Based on this, Collins et al. (1994)[8] proposed a return-earnings relation model as shown in Equation (1).

$$R_t = \beta_0 + \beta_1 UX_t + \sum_{k=1}^{3} \beta_{k+1} \triangle E_t(X_{t+k}) + \varepsilon_t \quad \cdots\cdots \text{Equation (1)}$$

R_t : Stock Return
UX_t : Current Unexpected Earnings
$\triangle E_t(X_{t+k})$: Future Earnings

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5) Tucker, J. W. and P. A. Zarowin, Does Income Smoothing Improve Earnings Informativeness, *The Accounting Review* 81(1), 2006, pp.251～270.

6) *Ibid.*

7) Collins, D. W., S. P. Kothari, J. Shanken and R. G. Sloan, Lack of timeliness and noise as explanations for the low contemporaneous return-earnings association, *Journal of Accounting and Economics* 18(3), 1994, pp.289～324.

8) *Ibid.*

However, the variables in Eq. (1) cannot be observed at time t. Therefore, Tucker and Zarowin (2006)[9] modified Eq. (1) as Equation (2) below.

$$R_{i,t} = \beta_0 + \beta_1 X_{t-1} + \beta_2 X_t + \beta_3 X_{t3} + \beta_4 R_{t3} + \varepsilon_t \quad \cdots\cdots \text{Equation (2)}$$

$R_{i,t}$: Stock Return during Fiscal Year t
$X_{i,t-1}$: The Earnings per Share for Fiscal Year t−1
$X_{i,t}$: The Earnings per Share for Fiscal Year t
$X_{i,t3}$: The Sum of Earnings per Share for Fiscal Year t+1 through t+3
$R_{i,t3}$: The Annually Compounded Stock Return for Fiscal Year t+1 through t+3

Tucker and Zarowin (2006)[10] used X_{t-1} and X_t as proxies for UX_t in equation (1). Since the regression coefficient of X_t is an Earnings Response Coefficient (ERC), Tucker and Zarowin (2006)[11] explain that the sign of X_t must present a positive value.

And Tucker and Zarowin (2006)[12] explain that the sign of X_{t-1} should present a negative value based on the research results of Collins et al. (1994)[13] and Lundholm and Myers (2002).[14] According to Lundholm and Myers (2002),[15] X_{t-1} serves as an expectation for X_t at the time of t−1 in the regression model.

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9) Tucker, J. W. and P. A. Zarowin, Does Income Smoothing Improve Earnings Informativeness, *The Accounting Review* 81(1), 2006, pp.251～270.

10) *Ibid*.

11) *Ibid*.

12) *Ibid*.

13) Collins, D. W., S. P. Kothari, J. Shanken and R. G. Sloan, Lack of timeliness and noise as explanations for the low contemporaneous return-earnings association, *Journal of Accounting and Economics* 18(3), 1994, pp.289～324.

14) Lundholm, R. and L. A. Myers, Bringing the Future Forward : The Effect of Disclosure on the Returns-Earnings Relation, *Journal of Accounting Research* 40(3), 2002, pp.809～839.

15) *Ibid*.

If the regression coefficient of X_{t-1} has a similar magnitude compared to the regression coefficient of X_t and is of opposite sign, the market evaluates the accounting earings to follow a random walk model. If the regression coefficient of X_{t-1} approaches zero, the market evaluates earnings as following a white noise process.

Tucker and Zarowin (2006)[16] used X_{t3} as a proxy for changes in future expected earnings $[\triangle E_t(X_{t+k})]$ in Eq. (1). Tucker and Zarowin (2006)[17] call the regression coefficient of X_{t3} FERC. And Tucker and Zarowin (2006)[18] explain that the regression coefficient of X_{t3} should have a positive value.

Tucker and Zarowin (2006)[19] measure the change in future expected earnings (X_{t3}). However, Tucker and Zarowin (2006)[20] explain that X_{t3} reflects both future expected earnings and future unexpected earnings. In other words, in order to measure changes in future earnings $[\triangle E_t(X_{t+k})]$, only information on future earnings is needed. X_{t3} reflects both future expected earnings and future unexpected earnings.

For this reason, Tucker and Zarowin (2006)[21] included R_{t3} in the model according to the methodology of Collins et al. (1994)[22] and Lundholm and Myers (2002)[23] as a way to control future unexpected earnings. And Tucker

16) Tucker, J. W. and P. A. Zarowin, Does Income Smoothing Improve Earnings Informativeness, *The Accounting Review* 81(1), 2006, pp.251～270.

17) *Ibid*.

18) *Ibid*.

19) *Ibid*.

20) *Ibid*.

21) *Ibid*.

22) Collins, D. W., S. P. Kothari, J. Shanken and R. G. Sloan, Lack of timeliness and noise as explanations for the low contemporaneous return-earnings association, *Journal of Accounting and Economics* 18(3), 1994, pp.289～324.

23) Lundholm, R. and L. A. Myers, Bringing the Future Forward : The Effect of

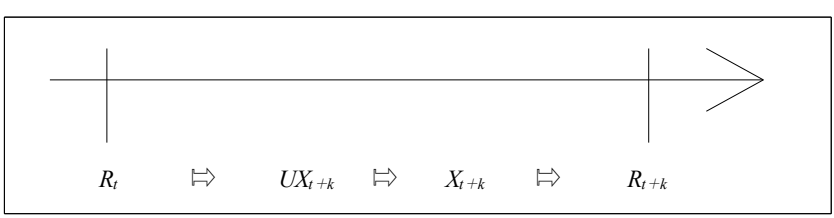
and Zarowin (2006)[24] expected that the sign of R_{t3} would have a negative value.

Assuming an efficient capital market, if an unpredictable event occurs at time of t+k, this event changes the unexpected future earnings (UX_{t+k}). As shown in <Figure 1>, unexpected future earnings (UX_{t+k}) will affect future earnings (X_{t+k}) and future stock returns (R_{t+k}).

In fact, unexpected future earnings (UX_{t+k}) cannot be predicted at the time of t. That is, when an unpredictable event at the time of t appears at the time of t+k, the unpredictable event changes unexpected future earnings (UX_{t+k}). Changes in unexpected future earnings (UX_{t+k}) change future earnings (X_{t+k}) and future stock returns (R_{t+k}). However, current stock returns (R_t) cannot be changed. Therefore, the R_{t3} regression coefficient of Eq. (2) is expected to have a negative sign (Collins et al. 1994).[25]

<Figure 1> R_{t3} regression coefficient

[Citations from LEE and Jung (2014)]



Disclosure on the Returns-Earnings Relation, *Journal of Accounting Research* 40(3), 2002, pp.809～839.

24) Tucker, J. W. and P. A. Zarowin, Does Income Smoothing Improve Earnings Informativeness, *The Accounting Review* 81(1), 2006, pp.251～270.

25) Collins, D. W., S. P. Kothari, J. Shanken and R. G. Sloan, Lack of timeliness and noise as explanations for the low contemporaneous return-earnings association, *Journal of Accounting and Economics* 18(3), 1994, pp.289～324.

2. Previous Studies Related to the Information Effects of Future Earnings

A previous study on the information effects of future earnings analyzes how firm-specific characteristic variables affect the information effects of future earnings based on the Future Earnings Response Coefficient(FREC) model presented by Tucker and Zarowin (2006).[26] Specifically, the specific characteristic variables of firms used in the research on the information effects of future earnings are the matching level, quality of earnings, information asymmetry, abnormal audit hours, competition within the industry and debt financing(Lee and Jung 2014 ; Kwon et al. 2012 ; Choi and Song 2004 ; Tucker and Zarowin 2006 ; Gelb and Zarowin 2002 ; Choi et al. 2011 ; Haw et al. 2012 ; Jung and Lee 2014 ; Jung 2015 ; Jung 2016).[27]

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26) Tucker, J. W. and P. A. Zarowin, Does Income Smoothing Improve Earnings Informativeness, *The Accounting Review* 81(1), 2006, pp.251～270.

27) Lee, H. J. and H. U. Jung, The Matching Level and Information Effect of Future Earnings, *Study on Accounting Taxation and Auditing* 60, 2014, pp.37～63. [printed in Korean] ; Kwon. S. Y., E. S. Ki and H. Seo, The Effect of Accruals Quality on Price Informativeness, *Korean Management Review* 41(1), 2012, pp.139～169. [printed in Korean] ; Choi, J. S. and D. G. Song, Does Income Smoothing Make Earnings and Cash Flows More Informative?, *Study on Accounting Taxation and Auditing* 40, 2004, pp.245～262. [printed in Korean] ; Tucker, J. W. and P. A. Zarowin, Does Income Smoothing Improve Earnings Informativeness, *The Accounting Review* 81(1), 2006, pp.251～270 ; Gelb, D. and P. A. Zarowin, Corporate Disclosure Policy and the Informativeness of Stock Prices, *Review of Accounting Studies* 7(1), 2002, pp.33～52 ; Choi, J. H., L. A. Myers, Y. Zang and D. Ziebart, Do Management EPS forecasts allow returns to reflect future earnings? Implication for the continuation of management's quarterly earnings guidance, *Review of Accounting Studies* 16(1), 2011, pp.143～182 ; Haw,

Lee and Jung (2014)[28] empirically analyzed the relationship between the matching level and the information effects of future earnings. As a result, the information effect of future earnings increases as the matching level increases.

According to Dichev and Tang (2008),[29] the noise included in net income decreases as the matching level increases. Based on these studies, Peak (2011)[30] explains that high matching levels act as an incentive to improve quality of earnings. This suggests that high quality of earnings could act as a factor in increasing the information effect of future earnings.

Extending this logic, Haw et al. (2012),[31] Kwon et al. (2012),[32] Choi and

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I. M., B. Hu and J. J. Lee, Investor protection and price informativeness about future earnings : international evidence, *Review of Accounting Studies* 17(2), 2012, pp.389～419 ; Jung, H. U. and K. I. Lee, Debt Financing and Future Earnings Response Coefficient, *Korean Corporation Management Review* 21(4), 2014, pp.41～61. [printed in Korean] ; Jung, H. U., The Effect of Competition of Market on Information Effect of Future Earnings, *Study on Accounting Taxation and Auditing* 67, 2016, pp.167～191. [printed in Korean] ; Jung. H. U., The Effect of Abnormal Audit Hours on Information Effect of Future Earnings, *Journal of Taxation and Accounting* 16(4), 2015, pp.9～34. [printed in Korean]

28) Lee, H. J. and H. U. Jung, The Matching Level and Information Effect of Future Earnings, *Study on Accounting Taxation and Auditing* 60, 2014, pp.37～63. [printed in Korean]

29) Dichev, I. and V. Tang, Matching and the Changing Properties of Accounting Earnings over the Last 40 Years, *The Accounting Review* 83(6), 2008, pp.1425～1460.

30) Paek, W., The Matching Principle and Earnings Quality, *Korean Accounting Review* 36(2), 2009, pp.101～127. [printed in Korean]

31) Haw, I. M., B. Hu and J. J. Lee, Investor protection and price informativeness about future earnings : international evidence, *Review of Accounting Studies* 17(2), 2012, pp.389～419.

32) Kwon. S. Y., E. S. Ki and H. Seo, The Effect of Accruals Quality on Price Informativeness, *Korean Management Review* 41(1), 2012, pp.139～169. [printed

Song (2004)[33] and Tucker and Zarowin (2006)[34] used accrual quality and income smoothing as proxies for quality of earnings to analyze the effects of quality of earnings on the information effects of future earnings. As a result, accrual quality and income smoothing, which are quality of earnings proxies, were positively related to the information effect of future earnings.

Bhattacharya et al. (2012)[35] report that information risk decreases when quality of earnings increases. Francis et al. (2008)[36] describe a complementary relationship between quality of earnings and voluntary disclosure levels. If the quality of earnings is negatively related to the information asymmetry level, it suggests that the low information asymmetry level can act as a factor to increase the information effect of future earnings.

In this regard, financial disclosures, dissemination of corporate information through the media, management forecasts and voluntary disclosure levels, which lower information asymmetry levels, appear to be positive factors for the information effects of future earnings(Choi et al. 2011 ; Haw et al. 2012 ; Gelb and Zarowin 2002).[37] In addition, previous studies related to the

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33) Choi, J. S. and D. G. Song, Does Income Smoothing Make Earnings and Cash Flows More Informative?, *Study on Accounting Taxation and Auditing* 40, 2004, pp.245～262. [printed in Korean]

34) Tucker, J. W. and P. A. Zarowin, Does Income Smoothing Improve Earnings Informativeness, *The Accounting Review* 81(1), 2006, pp.251～270.

35) Bhattacharya, N., F. Ecker, P. Olsson and K. Schipper, Direct and Mediated Associations among Earnings Quality, Information Asymmetry, and the Cost of Equity, *The Accounting Review* 87(2), 2012, pp.449～482.

36) Francis, J., D. Nanda and P. Olsson, Voluntary Disclosure, Earnings Quality, and Cost of Capital, *Journal of Accounting Research* 46(1), 2008, pp.53～99.

37) Choi, J. H., L. A. Myers, Y. Zang and D. Ziebart, Do Management EPS forecasts allow returns to reflect future earnings? Implication for the continuation of management's quarterly earnings guidance, *Review of Accounting Studies* 16(1),

information effects of future earnings report that the firm specific characteristic variables such as private debt ratio, the degree of competition in the industry, and abnormal audit hours have a systematic relationship with the information effects of future earnings(Jung and Lee 2014 ; Jung 2015 ; Jung 2016).[38]

3. Prior Research Related to CSR and Hypothesis

Kim et al. (2012)[39] report that social responsible firms have low incentives to conduct earnings management through discretion. This result is consistent with Alsaadi et al. (2017),[40] a sample of European Union countries. Alsaadi et al. (2017)[41] report that highly rated CSR firms are unlikely to carry out earnings management.

2011, pp.143～182 ; Haw, I. M., B. Hu and J. J. Lee, Investor protection and price informativeness about future earnings : international evidence, *Review of Accounting Studies* 17(2), 2012, pp.389～419 ; Gelb, D. and P. A. Zarowin, Corporate Disclosure Policy and the Informativeness of Stock Prices, *Review of Accounting Studies* 7(1), 2002, pp.33～52.

38) Jung, H. U. and K. I. Lee, Debt Financing and Future Earnings Response Coefficient, *Korean Corporation Management Review* 21(4), 2014, pp.41～61. [printed in Korean] ; Jung. H. U., The Effect of Abnormal Audit Hours on Information Effect of Future Earnings, *Journal of Taxation and Accounting* 16(4), 2015, pp.9～34. [printed in Korean] ; Jung, H. U., The Effect of Competition of Market on Information Effect of Future Earnings, *Study on Accounting Taxation and Auditing* 67, 2016, pp.167～191. [printed in Korean]

39) Kim, Y. T., M. S. Park and B. Wier, Is Earnings Quality Associated with Corporate Social Responsibility?, *The Accounting Review* 87(3), 2012, pp.761～796.

40) Alsaadi, A., M. S. Ebrahim and A. Jaafar, Corporate Social Responsibility, Shariah-Compliance, and Earnings Quality, *Journal of Financial Services Research* 51(2), 2017, pp.169～194.

41) *Ibid*.

In particular, Choi and Moon (2013)[42] report that Korean companies performing lower CSR activities have lower earnings management levels than those that do not. As a result, Choi and Moon (2013)[43] explain that companies performing CSR activities may have high quality of earnings.

Bhattacharya et al. (2012)[44] explain that information risk decreases as the quality of earnings increases. This suggests that there may be a negative relationship between CSR and information risk. Based on this logic, Choi et al. (2013)[45] analyzed the effect of CSR performance on information asymmetry. The results showed that CSR reduces information asymmetry.

Meanwhile, Prior et al. (2008),[46] an empirical analysis of 26 countries, reports that CSR has a positive relationship with earnings management. Prior et al. (2008)[47] explain that CSR is used as a managerial entrenchment strategy to reduce stakeholder interest in obtaining support from stakeholders after earnings management.

Yip et al. (2011)[48] analyzed whether the relationship between CSR and

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42) Choi, H. J. and D. C. Moon, The Relationship between Corporate Social Responsibilities and Accounting Transparency, *Korean Accounting Review* 38(1), 2013, pp.135～171. [printed in Korean]

43) *Ibid*.

44) Bhattacharya, N., F. Ecker, P. Olsson and K. Schipper, Direct and Mediated Associations among Earnings Quality, Information Asymmetry, and the Cost of Equity, *The Accounting Review* 87(2), 2012, pp.449～482.

45) Choi, J. H., L. A. Myers, Y. Zang and D. Ziebart, Do Management EPS forecasts allow returns to reflect future earnings? Implication for the continuation of management's quarterly earnings guidance, *Review of Accounting Studies* 16(1), 2011, pp.143～182.

46) Prior, D., J. Surroca and J. A. Tribó, Are Socially Responsible Managers Really Ethical? Exploring the Relationship Between Earnings Management and Corporate Social Responsibility, *Corporate Governance* 16(3), 2008, pp.160～177.

47) *Ibid*.

48) Yip, E., C. V. Staden and S. Cahan, Corporate Social Responsibility Reporting

earnings management differs by industry. Yip et al. (2011)[49] report that there is a negative relationship between CSR and earnings management in the oil and gas industry, but a positive relationship between CSR and earnings management in the food industry.

Chih et al. (2008)[50] empirically analyzed the relationship between CSR and earnings management in 46 countries. Specifically, Chih et al. (2008)[51] measured earnings management, earnings smoothing, earnings aggressiveness and avoiding earnings losses. The results show that companies with high CSR levels tend to have low trends in earnings smoothing and avoiding earnings losses.

High levels of earnings management negatively affect earnings quality, which in turn reduces the predictive ability of future earnings and cash flows (Lev 2003).[52]

Previous studies on FERC report that the quality of earnings increases the information effect of future earnings. If CSR acts as an incentive to improve quality of earnings, CSR will act as an incentive to increase the information effect of future earnings. In this study, the following hypotheses are established.

Hypothesis : CSR activities will have a positive relationship with FERC.

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and Earnings Management : The Role of Political Costs, *Australasian Accounting Business and Finance Journal* 5(3), 2011, pp.17～34.

49) *Ibid*.

50) Chih, H. L., C. H. Shen and F. C. Kang, Corporate Social Responsibility, Investor Protection, and Earnings Management : Some International Evidence, *Journal of Business Ethics* 79, 2008, pp.179～198.

51) *Ibid*.

52) Lev, B., Corporate earnings : facts and fiction, *Journal of Economic Perspectives* 17(2), 2003, pp.27～50.

Ⅲ. Research Methodology

1. Research Model

In this study, a model is established as shown in Equation (3) to test the hypothesis.

$$R_t = \beta_0 + \beta_1 X_{t-1} + \beta_2 X_t + \beta_3 X_{t3} + \beta_4 R_{t3} + \beta_5 CSR_t + \beta_6 CSR_t \times X_{t-1} + \beta_7 CSR_t \times X_t + \beta_8 CSR_t \times X_{t3} + \beta_9 CSR_t \times R_{t3} + \varepsilon_t \quad \cdots\cdots \text{Equation (3)}$$

CSR : KEJI index

Others refers to equation (2)

β_8 in Equation (3) captures the effect of CSR on stock returns in relation to future earnings. When β_8 represent a significantly positive(+) value, CSR could be considered to increase the information effect of future earnings. However when β_8 represent a significantly negative(−) value, CSR could be considered to decrease the information effect of future earnings.

2. Selecting Samples

Samples for this study were selected by below conditions from the year 2008 to 2014.

(1) Companies listed on the securities market from 2007 to 2017, excluding financial businesses
(2) Companies whose fiscal year is December
(3) Companies with positive capital and with Unmodified audit opinion

(4) Companies that can extract financial statement data and stock price data from NICE's Kis-Value and TS-2000 databases
(5) Companies that can collect KEJI index data

<Table 1> below shows the sample selection process. Specifically, 8,592 companies (company-year) satisfy the condition (1). Of the 8,592 companies (company-years), 4,102 companies (company-year) did not satisfy the condition (2) and (3). In addition, 2,582 companies (company-year) did not satisfy the conditions (4) and (5). The final sample was therefore 1,908 (company-year).

<Table 1> Organization of the sample

(Units : company-year)

Companies that satisfy the conditions (1)	8,592(company-year)
− Companies that do not meet the conditions (2) and (3)	− 4,102(company-year)
− Companies that do not satisfy conditions (4) and (5)	− 2,582(company-year)
Final sample	1,908(company-year)

Ⅳ. Result of Empirical Analysis

1. Descriptive Statistics and Correlation of Major Variables

<Table 2> shows the descriptive statistics of each variable. The descriptive statistics showed the mean, standard deviation and quartile of each variable. In <Table 2>, mean(median) of R_t is 0.1121(0.0370) and standard deviation is 0.5030. The reason that the mean and median of R_t in this study is lower than

those of Tucker and Zarowin(2006),[53] is considered to be the difference in samples. Tucker and Zarowin(2006)[54] studied the US companies registered in 'Compustat' from 1993 to 2000, but this study targets domestic companies that have been listed in securities market. So the difference in the mean and median is considered to be from these differences. However, the distribution of R_t in this study seems to be similar to Tucker and Zarowin (2006).[55]

Mean(median) of X_{t-1} is 0.0930(0.0845), and mean(median) of X_t is 0.0851(0.0796). And mean(median) of X_{t3} is 0.2437(0.2190) and mean(median) of R_{t3} is 0.3923(0.1625). The mean(median) of these variables are relatively higher than those of Tucker and Zarowin(2006),[56] but their distribution is considered to be similar.

Finally, the mean (median) of *CSR*, the variable of interest in this study, is 52.6316 (49.6850) and the standard deviation is 8.9679. The *CSR* mean of this study is slightly higher than the median.

<Table 2> Descriptive Statistics

Variable	*Mean*	*Std.*	*Min*	*25%*	*Median*	*75%*	*Max*
R_t	0.1121	0.5030	−0.9762	−0.1889	0.0370	0.3090	2.9105
X_{t-1}	0.0930	0.1505	−1.5333	0.0433	0.0845	0.1396	1.9950
X_t	0.0851	0.1764	−1.8630	0.0324	0.0796	0.1433	1.2042
X_{t3}	0.2437	0.4688	−3.5066	0.0787	0.2190	0.4215	2.7148
R_{t3}	0.3923	0.9708	−0.9737	−0.1838	0.1625	0.7120	7.9920
CSR	52.6316	8.9679	35.8000	44.6625	49.6850	61.6225	72.1600

53) Tucker, J. W. and P. A. Zarowin, Does Income Smoothing Improve Earnings Informativeness, *The Accounting Review* 81(1), 2006, pp.251~270.

54) *Ibid.*

55) *Ibid.*

56) *Ibid.*

Variable definitions

$R_{i,t}$: stock return during fiscal Year t, $X_{i,t-1}$: the earnings per share for fiscal Year t−1, $X_{i,t}$: the earnings per share for fiscal Year t, $X_{i,t3}$: the sum of earnings per share for fiscal Year t+1 through t+3, R_{t3} : the annually compounded stock return for fiscal Year t+1 through t+3 and *CSR* : KEJI index.

<Table 3> shows the Pearson correlation between the variables used in empirical analysis. In <Table 3>, R_t has a significant positive correlation with X_{t-1}, X_t and X_{t3}. And R_t has a significant negative correlation with R_{t3}.

In particular, R_t appears to have a significant positive correlation with *CSR*. This is a result of excluding the effects of control variables, but suggests that social responsibility activities can have a positive effect on stock prices.

<Table 3> Pearson Correlation

Variable	R_t	X_{t-1}	X_t	X_{t3}	R_{t3}
X_{t-1}	0.0443**				
X_t	0.3418***	0.2764***			
X_{t3}	0.2406***	0.1442***	0.3016***		
R_{t3}	−0.1601***	−0.0135	−0.1230***	0.2593***	
CSR	0.0621***	0.0132	−0.0714***	−0.0347	−0.0341

1) ***, **, and * are significant at the 1%, 5%, and 10% levels, respectively.

2) Refer to <Table 2> for variable definitions.

2. Main Results

Model 1 in <Table 4> is the result of re-validating the FERC model of Tucker and Zarowin (2006).[57] Model 2 is the result of the effect of CSR on the information effect of future earnings, excluding the year effect and the industry effect. And Model 3 is the result of including the year effect and the industry effect on the effect of CSR on information effect of future earnings.

First of all, in the result of the Model 1 of <Table 4>, the regression coefficients of X_{t-1} and R_{t3} have significantly negative(−) value, and the regression coefficients of X_t and X_{t3} have significantly positive(+) value. This is consistent with the expected signs, and also consistent with the result by Tucker and Zarowin(2006).[58]

In the result of Model 2 and Model 3 of <Table 4>, the regression coefficients of $CSR \times X_{t3}$ are both significantly positive(+) value. These results indicate that *CSR* has a positive relationship with FERC. This suggests that Corporate Social Responsibility increases the information effect of future earnings.

<Table 4> Result of hypothesis testing

$$R_t = \beta_0 + \beta_1 X_{t-1} + \beta_2 X_t + \beta_3 X_{t3} + \beta_4 R_{t3} + \beta_5 CSR_t + \beta_6 CSR_t \times X_{t-1} + \beta_7 CSR_t \times X_t + \beta_8 CSR_t \times X_{t3} + \beta_9 CSR_t \times R_{t3} + \varepsilon_t$$

Variable	*Model 1*		*Model 2*		*Model 3*	
	Estimates	*t-value*	*Estimates*	*t-value*	*Estimates*	*t-value*
Intercept	0.0470	3.39***	−0.0741	−0.92	0.0490	0.29
X_{t-1}	−0.2152	−2.96***	−0.9120	−2.09**	−0.6112	−1.53

57) Tucker, J. W. and P. A. Zarowin, Does Income Smoothing Improve Earnings Informativeness, *The Accounting Review* 81(1), 2006, pp. 251~270.

58) *Ibid.*

Variable	Model 1		Model 2		Model 3	
	Estimates	t-value	Estimates	t-value	Estimates	t-value
X_t	0.7756	11.77***	1.7526	4.20***	1.2041	3.13***
X_{t3}	0.2310	9.32***	−0.0540	−0.35	−0.1878	−1.30
R_{t3}	−0.0949	−8.28***	−0.2838	−4.26***	−0.1191	−1.91*
CSR_t			0.0022	1.42	−0.0115	−3.67***
$CSR_t \times X_{t-1}$			0.0134	1.57	0.0083	1.06
$CSR_t \times X_t$			−0.0202	−2.35**	−0.0112	−1.42
$CSR_t \times X_{t3}$			0.0063	1.98**	0.0085	2.89***
$CSR_t \times R_{t3}$			0.0036	2.86***	0.0010	0.84
YD	not included		not included		included	
ICODE	not included		not included		included	
F-value	98.34***		48.77***		34.07***	
Adj.R^2	0.1695		0.1840		0.3189	

1) ***, **, and * are significant at the 1%, 5%, and 10% levels, respectively.
2) Refer to <Table 2> for variable definitions.

3. Additional Test

<Table 4> shows the results of analyzing the relationship between *CSR* and information effect of future earnings based on the research methodology of Tucker and Zarowin (2006).[59] According to the results of <Table 4>, *CSR* is a positive factor for the information effect of future earnings. However, the results in <Table 4> may be the result of omitted variables.

This study included control variables in equation (3) to control the effects of omitted variables. Specifically, the control variables are *FOR* (proxy of

59) Tucker, J. W. and P. A. Zarowin, Does Income Smoothing Improve Earnings Informativeness, *The Accounting Review* 81(1), 2006, pp.251~270.

corporate governance, average foreign ownership for one year), *LEV* (debt ratio, total debt / asset total), *SIZE* [ln(total market value)] and *stEPS* (proxy of earnings volatility, three-year EPS standard deviation).

Model 1, Model 2, Model 3, and Model 4 in <Table 5> are the results of including *FOR*, *LEV*, *SIZE*, and *stEPS* in the model, respectively. Model 5 is the result of analyzing all these variables, and model 6 is the result of model 5 including year dummy and industry dummy.

As shown in <Table 5>, β_8 represents a significant positive sign for each model. These results are consistent with the results in <Table 5>. Even if the control variables are included, *CSR* is found to have a positive relationship with the information effect of future earnings.

<Table 5> Additional Analysis 1 : Results of hypothesis testing, including control variables (control on omission variable)

$$R_t = \beta_0 + \beta_1 X_{t-1} + \beta_2 X_t + \beta_3 X_{t3} + \beta_4 R_{t3} + \beta_5 CSR_t + \beta_6 CSR_t \times X_{t-1} + \beta_7 CSR_t \times X_t + \beta_8 CSR_t \times X_{t3} + \beta_9 CSR_t \times R_{t3} + \beta_{10} Z_t + \beta_{11} Z_t \times X_{t3} + \varepsilon_t$$

Variable	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	Estimates	t-value	Estimates	t-value	Estimates	t-value	Estimates	t-value	Estimates	t-value	Estimates	t-value
Intercept	−0.0528	−0.64	−0.1540	−1.81*	0.0825	0.77	−0.0225	−0.27	0.0096	0.09	−0.0045	−0.02
X_{t-1}	−0.8633	−1.98**	−0.8101	−1.86*	−0.9107	−2.09**	−0.9353	2.15**	−0.8078	−1.85*	−0.5401	−1.35
X_t	1.7878	4.28***	1.7581	4.22***	1.7769	4.26***	1.8107	4.34***	1.8444	4.42***	1.2864	3.34***
X_{t3}	−0.0856	−0.55	−0.0548	−0.34	−0.3294	−1.34	−0.1042	−0.67	−0.3282	−1.32	−0.3428	−1.48
R_{t3}	−0.2763	−4.13***	−0.2755	−4.14***	−0.2732	−4.09***	−0.2770	−4.16***	−0.2606	−3.90***	−0.1006	−1.61
CSR_t	0.0026	1.70*	0.0024	1.58	0.0005	0.31	0.0024	1.54	0.0015	0.87	−0.0096	−2.80***
$CSR_t \times X_{t-1}$	0.0125	1.47	0.0118	1.39	0.0133	1.56	0.0140	1.65*	0.0119	1.40	0.0074	0.94
$CSR_t \times X_t$	−0.0209	−2.43**	−0.0200	−2.34**	−0.0206	−2.40**	−0.0217	−2.53**	−0.0220	−2.56**	−0.0130	−1.63
$CSR_t \times X_{t3}$	0.0059	1.86*	0.0064	2.01**	0.0097	2.45**	0.0063	1.97**	0.0087	2.16**	0.0102	2.74***
$CSR_t \times R_{t3}$	0.0035	2.71***	0.0035	2.75***	0.0034	2.66***	0.0034	2.67***	0.0031	2.40**	0.0005	0.46
$Z(FOR_t)$	−0.0815	−1.99**							−0.0309	−0.69	0.0114	0.27
$Z(FOR_t) \times R_{t3}$	0.0987	1.24							0.0874	1.07	0.0475	0.63
$Z(LEV_t)$			−0.1288	−3.19***					−0.1319	−3.26***	−0.1277	−3.37***

Variable	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	Estimates	t-value	Estimates	t-value	Estimates	t-value	Estimates	t-value	Estimates	t-value	Estimates	t-value
$Z(LEV_t) \times R_{t3}$			0.0001	0.00					0.0065	0.08	0.0289	0.39
$Z(SIZE_t)$					0.0956	2.20**			0.0711	1.54	0.0628	1.20
$Z(SIZE_t) \times R_{t3}$					0.1413	1.46			0.1079	1.09	0.0701	0.77
$Z(stEPS_t)$							−0.1212	−2.87***	−0.0968	−2.10**	−0.0742	−1.74*
$Z(stEPS_t) \times R_{t3}$							0.1173	1.43	0.0726	0.85	0.0421	0.53
YD	not included		not included		not included		not included		not included		included	
ICODE	not included		not included		not included		not included		not included		included	
F-value	40.31***		41.26***		40.43***		40.78***		27.55***		26.95***	
Adj.R^2	0.1849		0.1885		0.1853		0.1866		0.1917		0.3226	

1) ***, **, and * are significant at the 1%, 5%, and 10% levels, respectively.

2) Variable definitions : *FOR* (average percentage of common shares held by foreign investor for one year) ; *LEV* (total debt at the end of year t / asset total at the end of year t), *SIZE* [ln(total market value at the end of year t)] and *stEPS* (three-year EPS standard deviation) and for the other variables refer to <Table 2> for variable definitions.

Firm's size effect could be considered whether the CSR activities could change the firm's value or quality of earnings(Uhlaner et al. 2012 ; Torugsa, et. al. 2013 ; Van Gils et al. 2014).[60] Big size companies are likely to be able to spend on CSR activities. In this regard, <Table 4> and <Table 5> suggest that the increase in value relevance of future earnings may be due to the size effect. In this study, the effects of CSR activities on the information effects of future earnings are additionally analyzed by dividing the group based on the median of total assets at the end of year.

Model 1 of <Table 6> analyzes the relationship between CSR activities and information effects of future earnings in a small size group. And model 2 analyzes the relationship between CSR activities and information effects of future earnings in a big size group.

Looking at the results of the analysis, $CSR \times X_{t3}$ gives a significant positive value for each model. This suggests that CSR activities are increasing the value of future earnings, regardless of size.

60) Uhlaner, L. M., Berent-Braun, M. M., Jeurissen, R. J. and de Wit, G., Beyond size : Predicting engagement in environmental management practices of Dutch SMEs, *Journal of Business Ethics* 109(4), 2012, pp.411~429 ; Torugsa, N. A., O'Donohue, W. and Hecker, R., Proactive CSR : An empirical analysis of the role of its economic, social and environmental dimensions on the association between capabilities and performance, *Journal of Business Ethics* 115(2), 2013, pp.383~402 ; Van Gils, A., Dibrell, C., Neubaum, D. O. and Craig, J. B., Social issues in the family enterprise, *Family Business Review* 27, 2014, pp.193~205.

<Table 6> Additional Analysis 2 : Results of Hypothesis Testing Based on Size

Variable	Model 1 (small size group, n=954)		Model 2 (big size group, n=954)	
	Estimates	t-value	Estimates	t-value
Intercept	−0.4017	−1.32	0.3577	1.31
X_{t-1}	−0.1628	−0.27	−0.9655	−1.73*
X_t	1.5728	2.86***	1.3488	2.40**
X_{t3}	−0.2768	−0.76	−0.5918	−1.78*
R_{t3}	−0.1387	−1.58	−0.0700	−0.78
CSR_t	−0.0086	−1.72*	−0.0086	−1.77*
$CSR_t \times X_{t-1}$	0.0035	0.29	0.0137	1.28
$CSR_t \times X_t$	−0.0196	−1.74*	−0.0132	−1.14
$CSR_t \times X_{t3}$	0.0108	1.89*	0.0116	2.29**
$CSR_t \times R_{t3}$	0.0008	0.45	0.0003	0.15
$Z(FOR_t)$	0.0516	0.87	−0.0330	−0.50
$Z(FOR_t) \times R_{t3}$	−0.0539	−0.48	0.1561	1.38
$Z(LEV_t)$	−0.2118	−3.74***	−0.0439	−0.82
$Z(LEV_t) \times R_{t3}$	−0.0488	−0.43	0.0353	0.33
$Z(SIZE_t)$	0.0470	0.45	0.2801	2.56**
$Z(SIZE_t) \times R_{t3}$	0.0877	0.68	0.1191	0.77
$Z(stEPS_t)$	−0.1825	−2.66***	−0.0066	−0.11
$Z(stEPS_t) \times R_{t3}$	0.0208	0.17	0.0687	0.61
YD	included		included	
ICODE	included		included	
F-value	16.25***		13.37***	
Adj.R^2	0.3456		0.3124	

1) ***, **, and * are significant at the 1%, 5%, and 10% levels, respectively.

2) refer to <Table 2> and <Table 5> for variable definitions.

Prior et al. (2008)[61] describe the use of CSR activities as a managerial entrenchment strategy that reduces stakeholder interest after earnings management. This suggests that CSR activities can be used opportunistically. On the other hand, Kook and Kang (2011)[62] suggest that CSR activities of firms with good(weak) corporate governance act as incentives to increase(decrease) firm value.

Expanding this logic, the effect of CSR activities on stock prices may differ depending on corporate governance. In other words, the relationship between CSR activities and the information effects of future earnings will differ depending on corporate governance. Therefore, in this study, we analyzed the relationship between CSR and information effects of future earings in each group by dividing samples into groups with good corporate governance and weak groups.

The corporate governance of this study is measured as the legal minimum outside director.[63] Panel A in <Table 7> is a group that meets the legal minimum outside director, and Panel B in <Table 7> is a group that does not meet the legal minimum outside director.

In other words, Panel A of <Table 7> shows the results of analyzing the relationship between CSR and the information effects of future earnings for a group with good corporate governance. Panel B shows the result of analyzing the relationship between CSR and information effects of future earnings for

61) Prior, D., J. Surroca and J. A. Tribó, Are Socially Responsible Managers Really Ethical? Exploring the Relationship Between Earnings Management and Corporate Social Responsibility, *Corporate Governance* 16(3), 2008, pp.160～177.

62) Kook. C. P. and Y. S. Kang, Corporate Social Responsibility, Corporate Governance and Firm Value, *Korean Journal of Financial Studies* 40(5), 2011, pp.713～748. [printed in Korean]

63) Legal minimum number of outside directors : 50%(25%) of listed directors if assets are over (less) 2 trillion won.

groups with poor corporate governance. Model 1 of Panel A and Panel B is the result without the control variable, and Model 2 of Panel A and Panel B is the result with the control variable.

Looking at the results of <Table 7>, the regression coefficient of $CSR \times X_{t3}$ suggests a positive value in both Panel A and Panel B. This is contrary to the results of Kook and Kang (2011),[64] suggesting that CSR activities are enhancing the information effect of future earnings. These findings suggest that CSR activities are positively related to the information effects of future earnings regardless of corporate governance.

<Table 7> Additional Analysis 3 : Results of Hypothesis Testing Based on Corporate Governance

Panel A : Group with excellent corporate governance(Companies Meeting Legal Outside Directors)

Variable	Model 1		Model 2	
	Estimates	t-value	Estimates	t-value
Intercept	0.2899	1.48	0.2934	1.35
X_{t-1}	−1.4611	−2.89***	−1.4232	−2.81***
X_t	1.2845	2.74***	1.4182	3.01***
X_{t3}	−0.1878	−1.04	−0.5840	−1.81*
R_{t3}	−0.1658	−2.12**	−0.1551	−1.97**
CSR_t	−0.0148	−4.00***	−0.0144	−3.54***
$CSR_t \times X_{t-1}$	0.0228	2.36**	0.0225	2.33**
$CSR_t \times X_t$	−0.0131	−1.41	−0.0164	−1.76*
$CSR_t \times X_{t3}$	0.0083	2.36**	0.0143	2.89***

64) Kook. C. P. and Y. S. Kang, Corporate Social Responsibility, Corporate Governance and Firm Value, *Korean Journal of Financial Studies* 40(5), 2011, pp.713～748. [printed in Korean]

Variable	Model 1		Model 2	
	Estimates	t-value	Estimates	t-value
$CSR_t \times R_{t3}$	0.0017	1.16	0.0013	0.90
$Z(FOR_t)$	not included		0.0416	0.77
$Z(FORt) \times R_{t3}$			−0.0511	−0.48
$Z(LEV_t)$			−0.1352	−2.97***
$Z(LEVt) \times R_{t3}$			−0.1650	−1.62
$Z(SIZE_t)$			0.0585	0.96
$Z(SIZE_t) \times R_{t3}$			0.2083	1.58
$Z(stEPS_t)$			−0.1163	−2.23**
$Z(stEPS_t) \times R_{t3}$			0.1408	1.31
YD	included		included	
ICODE	included		included	
F-value	22.43***		17.97***	
$Adj.R^2$	0.3188		0.3246	

Panel B : Groups with weak corporate governance(Companies Not Meeting Legal Outside Directors)

Variable	Model 1		Model 2	
	Estimates	t-value	Estimates	t-value
Intercept	−0.4323	−1.13	−0.5588	−1.28
X_{t-1}	0.4075	0.59	0.6980	0.99
X_t	1.3750	1.75*	1.4776	1.88*
X_{t3}	−0.2955	−1.03	−0.4424	−1.10
R_{t3}	−0.0539	−0.48	−0.0027	−0.02
CSR_t	−0.0073	−1.20	−0.0025	−0.38
$CSR_t \times X_{t-1}$	−0.0085	−0.60	−0.0137	−0.95

Variable	Model 1		Model 2	
	Estimates	t-value	Estimates	t-value
$CSR_t \times X_t$	−0.0143	−0.84	−0.0152	−0.90
$CSR_t \times X_{t3}$	0.0111	1.80*	0.0119	1.70*
$CSR_t \times R_{t3}$	0.0000	−0.02	−0.0010	−0.48
$Z(FOR_t)$	not included		−0.0280	−0.36
$Z(FOR_t) \times R_{t3}$			0.1053	0.85
$Z(LEV_t)$			0.1367	1.82*
$Z(LEV_t) \times R_{t3}$			0.1826	1.47
$Z(SIZE_t)$			−0.1241	−1.10
$Z(SIZE_t) \times R_{t3}$			0.0229	0.16
$Z(stEPS_t)$			−0.0227	−0.28
$Z(stEPS_t) \times R_{t3}$			−0.1084	−0.82
YD	included		included	
ICODE	included		included	
F-value	14.27***		11.11***	
Adj.R^2	0.3223		0.3256	

1) ***, **, and * are significant at the 1%, 5%, and 10% levels, respectively.

2) refer to <Table 2> and <Table 5> for variable definitions.

Ⅴ. Conclusion

This study empirically analyzes the effects of CSR activities on the information effects of future earnings. For the CSR activities, we use the KEJI index, and the research model uses the future earnings response coefficient model of Tucker and Zarowin (2006).[65)]

Previous studies on the information effects of future earnings show that high earnings quality increases the information value of future earnings. However, previous studies on CSR report mixed results on the relationship between CSR and quality of earnings.

If Korean companies' CSR activities act as an incentive to increase the information value of future earnings, CSR activities are expected to increase the information effects of future earnings. Based on this logics, this study established a hypothesis that there would be a positive relation between CSR activity and information effects of future earnings.

The results showed that CSR activities are positively related to the information effects of future earnings. This is consistent with controlling the effects of size and omission variables. According to these results, the CSR activities of Korean companies can be interpreted as increasing the information effect of future earnings.

In addition, this study analyzed the effect of CSR activities on the information effects of future earnings in each group by grouping companies

65) Tucker, J. W. and P. A. Zarowin, Does Income Smoothing Improve Earnings Informativeness, *The Accounting Review* 81(1), 2006, pp.251~270.

with good corporate governance and weak companies. The results of the analysis show that CSR activities increase the information effects of future earnings in all groups. Taken together, the CSR activities of Korean companies appear to be positive factors for the stock price.

This study contributes to the finding that there is a complementary relationship between CSR activity and earnings quality in the mixed situation of the relationship between CSR activity and the quality of accounting information. In addition, this study is expected to provide implications that corporate social responsibility may affect stock prices.

In this regard, the results of this study are expected to be useful data for investor's investment decision making and policy maker's policy making. In addition, this study contributes to the fact that Korean companies need to strategically utilize CSR activities. This study has limitations that do not measure implied CSR activity. This study has a limitation in not using time series analysis due to data collection limitations.

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<국문초록>

기업의 사회적 책임과 미래이익의 정보효과*

변선영** · 정현욱***

본 연구는 CSR 활동이 기업의 미래이익의 주가관련성에 어떠한 영향을 주는지 살펴봄으로서 한국의 CSR 활동이 미래이익의 정보성에 어떠한 영향을 미치는 지를 분석하고자 한다. 본 연구는 기업의 사회적 책임(이하 'CSR') 활동이 미래 이익의 정보 효과와 양(+)의 관련성이 있을 것이라는 가설을 세우고, Tucker and Zarowin (2006)의 미래이익반응계수 모형(FERC, Future Earnings Response Coefficient)을 사용하여 실증분석을 실시했다. 본 연구의 가설은 CSR 활동과 관련하여 상이한 연구결과에 근거하여 설정하였다.

분석 결과, 미래이익과 CSR 활동 사이에는 긍정적인 관계가 있음을 보여준다. 이는 누락 변수의 효과를 통제한 결과에서도 일관된 것으로 나타났다. 이러한 결과를 바탕으로 볼 때, CSR 활동은 미래이익의 정보성을 높이는 것으로 해석할 수 있다.

또한, 본 연구는 지배구조가 양호한 기업과 지배구조가 취약한 기업으로 그룹을 나눈 뒤 CSR 활동이 미래이익의 정보효과에 미치는 영향을 추가로 분석했다. 분석 결과, CSR 활동은 기업지배구조가 양호한 그룹과 기업지배구조가 취약한 그룹 모두에서 미래이익의 정보효과를 높이는 것으로 나타났다. 종합해보면, 투자자들은 CSR 활동을 긍정적인 활동이라고 판단하고, 이로 인해 결과적으로, CSR 활동은 미래이익의 가치 관련성을 높이기 위한 동기 요소로 작용하고 있음을 시사한다.

본 연구는 CSR이 주가에 영향을 미칠 수 있다는 시사점을 제공할 것으로 기대된다. 그런 점에서 본 연구의 결과는 투자자의 투자 의사결정과 정책 입안자의 정책 결정에 유용한 자료가 될 것으로 보여진다. 그리고 이번 연구는 한국 기업들이 CSR 활동을 전략적으로 활용할 필요가 있다는 것을 시사한다. 그럼에도 불구하고 본 연구에서는 내재된 CSR 활동을 측정하지 않았다는 점에서 한계를 갖는다.

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▶ **주제어 :** 기업의 사회적 책임, 미래이익반응계수(FERC), 미래이익의 정보효과, 기업지배구조, 경제정의지수