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Does Conditional Conservatism Affect Credit Ratings?: An Analysis Of Korean KRX Bond Issuers

Lim, Hyoung-Joo* · Mali, Dafydd**

Abstract: We examine whether there is a relationship between conditional conservatism and credit ratings. Credit rating levels are the 'opinion' of credit rating agencies about a firm's default risk based on financial statements data and corporate governance information. In South Korea, credit rating levels are issued by National Information & Credit Evaluation (NICE), Korea Investor Services (KIS), Korea Ratings (KR) and Seoul Credit Rating & Information (SCI), and are used by bond investors, debt issuers, and governmental officials for decision making and legislative purposes. Accounting practices such as conditional conservatism have the potential to signal low default risk and financial stability. Accounting conservatism reflects a manager's tendency to recognize "bad news" in a timelier manner than "good news" (Basu, 1997). The academic community continues to debate the merits of conservatism. However, the majority of studies suggest that conditional conservatism is an accounting practice with the potential to increase accounting quality (Watts, 2003; Roychowdhury and Watts, 2007; Ball and Kothari, 2008). In the U. S., numerous studies find an association between level of conservatism and credit ratings (Ahmed et al., 2002; Moerman (2006); Nikolaev (2007); Bauwhede (2007); Zhang, 2008; Peek 2010). Therefore, in the U.S., there is evidence to suggest that credit ratings agencies care about conditional conservatism as an accounting practice with the potential to influence default risk.

In South Korea, there is evidence of a positive relation between accounting conservatism levels and credit ratings (Park et al., 2011). However, the association between credit rating changes and financial conservatism is a question left unanswered. Our motivation is to address this caveat. To our knowledge, our study is the first to analyze the association between conditional conservatism and credit ratings and credit rating changes using the two most popular conditional conservatism measures. We contribute to the literature by providing an evidence that conditional conservatism may influence a credit rating agency's perception of default risk.

We examine if conditional conservatism is associated with credit ratings based on the following; conditional conservatism is an accounting practice associated with reducing a manager's ability to 'inflate' net income; hence, constraining dividend has the potential to reduce a credit rating agency's perception of risk. Credit rating agencies issue higher credit ratings to firms with lower default risk. Thus, because firms care deeply about maintaining or increasing their credit ratings, conservative reporting should have a positive a relation with credit rating levels / credit ratings changes. We perform numerous tests to establish the relation between conditional conservatism and credit ratings / credit rating changes. We investigate the relationship between a firm's credit ratings / credit ratings changes and conditional conservatism using a KRX firm sample of 1,310 firm-years from 2002 to 2013. First, we establish the levels of conditional conservatism using the accruals based Ball and Shivakumar (2005) and the market based Basu (1997) models. The results suggest that firms borrow equity in the form of public debt are conservative, consistent with previous studies. Next, we use a dummy variable ap-

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proach to examine the relationship between conservatism and credit ratings for investment / non-investment grade firms. We find that investment and non-investment grade firms have statistically insignificantly different levels of financial conservatism.

Thirdly, we test if conditional conservatism has a statistically significant relation with credit rating changes. We find that firms that experience an increase or a decrease in their credit rating levels from period t to t+1 are marginally more conservative compared to firms with consistent credit rating levels. Next, we test the relation between conditional conservatism and credit rating increases. Firms with higher levels of conservatism may benefit from a credit rating increase because an increase in conservatism indicates lower risk. We use a dummy variable approach to capture if conservatism in period t has the potential to influence a credit rating period in t+1. We do not find a statistically significant relation between conservatism and credit ratings for our entire sample. However, we find that there is a positive relation between conservatism in period t and a credit rating increase in period t+1 for investment grade firms. Credit ratings have significant implications for a firm's access to capital. Firms below the investment grade level (BBB+ and below) are expected to face higher capital costs and face limited access to investor equity because of legislative restrictions compared to firms with investment grade bonds (A- to AAA). Credit ratings agencies may reward financially conservative firms above the investment grade threshold with a credit rating's increase because conditional conservatism is considered an important risk metric for firms above the investment grade. Other metrics may be more critical to firms below the investment grade cut-off.

Finally, we perform robustness checks for our main hypothesis. We find that firms that experience a credit rating increase in period t+1 have statistically significantly higher levels of conservatism in period t compared to firms experience a credit rating decrease or remain constant in period t+1, supporting our previous findings. Taken together, our results suggest that credit ratings agencies consider conditional conservatism when issuing credit ratings. Firms with higher credit ratings are generally more conservative. Moreover, conditionally conservative firms above the investment grade threshold can be rewarded with a credit rating increase**(Keywords: Conditional Conservatism, Credit Ratings, Basu Model, Ball and Shivakumar Model, Investment Grade).**

목 차

Ⅰ. Introduction

Credit ratings agencies provide an appraisal of a firms default risk. Bond investors, debt issuers, and governmental officials use credit ratings for decision making and legislative purposes because credit ratings are considered 'economically meaningful' (Boot at al. 2006; Kisgen 2006). Credit ratings have significant implications for a firm's access to capital. For example, firms below the investment grade level (BBB+ and below) are expected to face higher capital costs and face limited access to investor equity because of legislative restrictions compared to firms with investment grade bonds (A- to AAA). Thus, considering the importance of credit ratings for organizational operations, firms may use accounting practices such as conditional conservatism to signal a low default risk and financial stability.

Accounting conservatism reflects a manager's tendency to recognize "bad news" in a timelier manner than "good news" (Basu, 1997). The positives and negatives associated with financial conservatism are keenly discussed in academic community. However, the majority of studies find that conservatism has a positive association with financial quality (Watts, 2003; Roychowdhury and Watts, 2007; Ball and Kothari, 2008). In the U. S., numerous studies find an association between conservatism, credit ratings, the cost of debt and agency theory (Ahmed et al., 2002; Moerman (2006); Nikolaev (2007); Bauwhede (2007); Zhang, 2008; Peek et al., 2010). The results suggest that these is an association between default risk and financial conservatism. Therefore, in the U.S., there is evidence to suggest that credit ratings agencies care about conditional conservatism as an accounting practice with the potential to influence default risk.

In South Korea, there is evidence of a positive relation between accounting conservatism and credit ratings (Park et al., 2011). However, the association between credit rating changes and financial conservatism is a question left unanswered. Our motivation to write this paper is to address this caveat.

The purpose of this paper is to test if conditional conservatism, the accounting practice associated with reducing a manager's ability to 'inflate' net income; hence, constraining dividend has the potential to reduce a credit rating agency's perception of risk. Credit rating agencies should, in theory, issue higher credit ratings to firms with lower default risk. Because firms care deeply about maintaining or increasing their credit ratings, conservative reporting should have a positive relation with credit rating levels / credit ratings changes.

We perform tests to establish the relation between conditional conservatism and credit ratings / credit rating changes. First, we establish the levels of conditional conservatism from the accruals based Ball and Shivakumar (2005) and the market based Basu (1997) models. We find that firms that borrow equity in the form of public debt use conservative accounting practices. Next, we use a dummy variable approach to examine the relationship between conservatism and credit ratings for investment / non-investment grade firms. We find that investment and non-investment grade firms have statistically insignificant different levels of financial accounting. Thirdly, we test if conditional conservatism has a statistically significant relation with credit rating changes. We find that firms that experience an increase or a decrease in their credit rating levels from period t to t+1 are marginally more conservative compared to firms with

consistent levels of credit ratings.

Next, we test the relation between conditional conservatism and a credit ratings increase. We use a dummy variable approach to capture if conservatism in period t has the potential to influence a credit rating period in t+1. We do not find a statistically significant relation between conservatism and credit ratings for our entire sample. However, we find that there is a positive relation between conservatism in period t and a credit rating increase in period t+1 for investment grade firms. This result suggests that credit ratings agencies may financially reward conservative firms with a credit rating's increase. Finally, we perform robustness checks for our main hypothesis. We find that firms that experience a credit rating increase in period t+1 have a statistically significantly higher level of conservatism in period t compared to firms experience a credit rating decrease or remain constant in period t+1, supporting our previous findings.

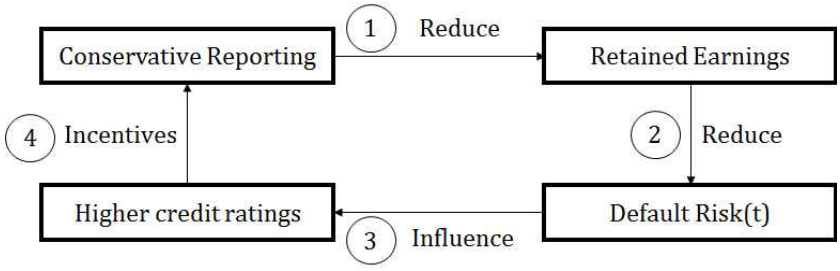
To our knowledge, our study is the first to analyze the association between conditional conservatism and credit ratings and credit rating changes using the two most popular conditional conservatism measures. We contribute to the literature by providing an evidence that conditional conservatism may influence a credit rating agency's perception of risk.

The remainder of this paper proceeds as follows. Section II reviews relevant literature and develops our hypothesis. In Section III, we explain the research design and the performance metrics. In Section IV, we present details of our results. Section V discusses our additional analysis results. Section VI concludes.

Ⅱ. Literature review and Hypotheses development

Credit ratings are extensively used by bond investors, debt issuers, and governmental officials as a measure of a firm's default risk(Lee and Jung, 2012). Boot et al. (2006) argue that credit ratings provide an 'economically meaningful role' by facilitating equilibrium in bond investment. Firms with a similar credit rating are grouped together as firms of similar quality (Kisgen, 2006). Standard and Poor's (2012) and Moody's Investor Service (2009) define credit risk as the possibility or expectation of financial default. In South Korea, the four largest credit ratings agencies are National Information & Credit Evaluation (NICE), Korea Investor Services (KIS), Korea Ratings (KR) and Seoul Credit Rating & Information (SCI). These credit rating agencies provide an independent appraisal of a firms default risk. As a rule, there are ten credit ratings categories. The highest categories in descending order are AAA, AA, A, BBB, BB, B, CCC, CC, C, D; each category from AA to CCC is divided into subcategories with +/-. A firm can experience a credit rating increases if credit risk decreases. If credit risk increases, a firm may experience a credit risk decrease.

Accounting conservatism has a long history, but the economic benefits and demands for conservatism are still hotly debated(Park, 2015; Lee et al., 2013). Accounting conservatism reflects a firm's tendency to recognize "bad news" in a timelier manner than "good news" (Basu, 1997). On one hand, there is evidence to suggest that conditional conservatism misinterprets financial performance (Givoly et al., 2007; Detrich et al., 2007). However, the overwhelming majority of



[Figure 1] Influence of Conditional Conservatism on Credit Ratings

previous studies find that conditional conservatism is positively related to earnings quality (Basu et al., 2001; Chung et al., 2003; Francis and Wang, 2008). Accounting conservatism is considered to be an important accounting practice that validates financial reporting (Watts, 2003; Roychowdhury and Watts, 2007; Ball and Kothari, 2008) and conservatism has the potential to reduce the opportunistic behavior of managers (Ball and Shivakumar, 2005). Moreover, auditors generally prefer conservative reporting due to the potential litigation risk (Lys and Watts, 1994).

Basu (1997) and Ball and Shivakumar (2005) have developed models based on the news-dependent nature of conditional conservatism. In debt contracting, timely loss recognition has the potential to affect debt covenants and relationships with stakeholder.

Once a bond issuer's financial condition deteriorates, the borrower can demand immediate access to their rights (principal and interest)

Research examining the association between financial conservatism and debt have focused on the agency cost of debt. Ahmed et al. (2002) use both market and accrual-based conservatism measurers to estimate the effect on conservatism on the cost of debt. Their results suggest that accounting conservatism is associated with a lower cost of debt, suggesting that accounting conservatism plays an important role in mitigating agency conflicts. Moerman (2006) reports a negative association between timely loss recognition and bid-ask spreads on traded loans, suggesting that conditional conservatism reduces information asymmetry by revealing losses in a timely fashion. Nikolaev (2007) finds a positive association between timely loss recognition and covenant intensity, suggesting that conditional conservatism increases the effectiveness of the use of covenants. Bauwhede (2007) finds that the credit ratings of firms in industries with more conditional conservatism are significantly more favorable, resulting in lower cost of debt to borrowers.

Zhang (2008) examines the relationship between yield spread on private debt measures, and finds that more conservative borrowers are more likely to violate debt covenants. Peek et al. (2010) investigate the demand for conservatism in the public versus private debt market. They find that when the ability for external financing decreases, lender's demands for conservatism is likely to lead to increased accounting conservatism. Beatty et al. (2008) find that in the debt market, when agency costs are higher, the demands for accounting conservatism is lower. Taken together, the literature suggests that conservatism reduces agency problems. Hence, there is a very strong possibility that CR agencies consider credit ratings as a default risk

metric. Thus, managers may use more conservative accounting to influence a credit ratings analyst's perception of default risk.

In a Korean setting, there is limited evidence to suggest a relationship between conservatism and credit ratings. Kim (2009) fails to find a significant association between credit rating and conservatism. Park et al. (2011) modify the Penman and Zhang (2002) model, and find a positive association between accounting conservatism and credit rating. However, the relationship between credit ratings changes and conditional conservatism in an empirical question left unanswered.

Firms below the investment-grade threshold have limited access to investors because of government or self-imposed limitations. For example, Rule 2a-7 of the Investment Company Act of 1940, stipulates limitations to investments for bonds below the A- level (investment grade bond from A- to AAA) compared to non-investment grade bonds (BBB+ firms and below). Credit rating downgrades / upgrades directly influences a firm's cost of capital. Firms that experience a credit rating increase (decrease) experience cost of capital decrease (increase). Credit ratings also influence relationships with third parties such as customers and suppliers, demonstrates a firm's stability, and is a form of signalling to stockholders.

[Figure 1] illustrates the association between the cost of debt and conservatism, based on previous literatures. (1) Conditional conservatism has the potential to reduce agency problems because conservative reporting reduces a manager's ability to 'inflate' net income; hence, retained earning is lower, which constrains dividend. (2) Thus, choosing more conservative accounting is one way to reduce default risk. (3) Credit rating agencies issue higher credit ratings to firms with lower default risk. (4) Firms care deeply about maintaining or increasing their credit ratings; therefore, conservative reporting should have a positive relation with credit rating levels / credit ratings changes (Ahmed et al., 2002). Therefore, based on the above arguments, we develop the following hypotheses;

H1. Firms with high credit ratings are more financially conservative than firms with lower credit ratings

H2. Financially conservative firms are more likely to experience a positive credit rating change.

Ⅲ. Research Design

3.1 Model specifications and variables descriptions

The purpose of this paper is to establish a relationship between credit ratings levels / credit ratings changes and conditional conservatism. We develop 10 models to test our hypothesis. 5 models are based on the Ball and Shivakumar (2005) measure; (1), (3), (5), (7), (9), and 5 models are based on the Basu measure; (2), (4), (6), (8), (10).

First, we establish the levels of conditional conservatism from the accruals based Ball and Shivakumar and Basu models from equations (1) and (2). In the BS model, a positive coefficient for α_3CFO*DCFO suggests financial conservatism. In the Basu model a positive coefficient for α_3 RET*DRET suggests financial conservatism.

Conditional Conservatism Model

$$TACC = \alpha_0 + \alpha_1 CFO + \alpha_2 DCFO + \alpha_3 CFO^* DCFO + \epsilon \quad (1)$$

$$EAR = \alpha_0 + \alpha_1 RET + \alpha_2 DRET + \alpha_3 RET^* DRET + \epsilon \quad (2)$$

Where[1],
TACC : Total accruals
CFO : Cashflow from operation
DCFO : A dummy variable that takes 1 if *CFO* is below 0, 0 otherwise
EAR : Net income scaled by prior year total assets
RET : 12 months cumulative stock returns
DRET : A dummy variable that takes 1 if *RET* is below 0, 0 otherwise

Next, we examine the relationship between conservatism and credit ratings for investment / non-investment grade firms. We regress the interaction terms of conservatism measures with IG (a dummy variable that takes 1 if credit rating is investment grade (above BBB+), 0 otherwise) to compare the conservatism level of investment / non-investment grade firms. Our variables of interest are the α_5 coefficients in equations (3) and (4). We hypothesize that firms above the investment grade cut off will have higher levels of conditional conservatism because conservatism has the potential to reduce managers' ability to increase net income; thus reduce risk. A reduction in risk may be rewarded by higher credit ratings. Therefore, we would expect to find a positive relation between conditional conservatism and credit ratings for firms above the investment grade cut-off level. Based on our above arguments, we expect α_5 to be positive. To estimate the relationship between conservatism and firms above the investment grade cut-off, we develop the following models:

Investment Grade Model

$$TACC = \alpha_0 + \alpha_1 CFO + \alpha_2 DCFO + \alpha_3 CFO^* DCFO + \alpha_4 IG + \alpha_5 CFO^* DCFO^* IG + \epsilon \quad (3)$$

$$EAR = \alpha_0 + \alpha_1 RET + \alpha_2 DRET + \alpha_3 RET^* DRET + \alpha_4 IG + \alpha_5 RET^* DRET^* IG + \epsilon \quad (4)$$

Where,
IG : A dummy variable that takes 1 if credit rating is investment grade(above BBB+), 0 otherwise

Equations (5) and (6) are designed to capture if conditional conservatism has a statistically significant relation with credit rating changes. The below models test whether firms that experience a credit rating change in period t+1 are more financially conservative than firms that do not experience a credit rating change. α_3 estimates the level of conditional conservatism for our sample. Our variable of interest is α_5, the interaction term CFO*DCFO*Change (or RET*DRET*Change) which captures the influence of conservatism on credit rating change. Change is a dummy variable that takes 1 if credit rating changes from t to t+1 period, 0 otherwise. A positive statistically significant result would suggest that firms that experience a credit rating change in period t+1 are more financially conservative in period t compared to firms that did not experience a credit rating change. We

1) For our conditional conservatism models, $\alpha_3 CFO^* DCFO (\alpha_3 RET^* DRET)$ captures timely loss recognition and is the conditional conservatism measure. The fundamental intuition of this measure is that firms with high levels of timely loss recognition have more sensitive earnings to economic shocks conditional on a bad news. Firms with low level of conditional conservatism may be 1) firms that ignore the economic shock or 2) firms that are constrained by predominating unconditional conservatism.

hypothesize that conservatism has the possibility to influence credit rating change. Therefore, we expect, α_5 positive.

We compare the levels of conditional conservatism in period t and credit ratings in t+1 based on Alissa et al., (2013). Alissa et al., (2013) suggests that management decisions, economic conditions, industry trends and management errors within period t have the potential to distort long term credit rating; therefore, 'capital structure adjustments may not be timely enough to allow firms to move closer to their expected ratings' in period t.

Credit rating change vs No Change

$$TACC = \alpha_0 + \alpha_1 CFO + \alpha_2 DCFO + \alpha_3 CFO * DCFO + \alpha_4 Change + \alpha_5 DCFO * CFO * Change + \epsilon \quad (5)$$

$$EAR = \alpha_0 + \alpha_1 RET + \alpha_2 DRET + \alpha_3 CFO * DRET + \alpha_4 Change + \alpha_5 RET * DRET * Change + \epsilon \quad (6)$$

$$TACC = \alpha_0 + \alpha_1 CFO + \alpha_2 DCFO + \alpha_3 CFO * DCFO + \epsilon$$

Where,

Change : A dummy variable that takes 1 if credit rating changed from to t to t+1 period, 0 otherwise

Next, equations (7) and (8) examine if firms that experienced a positive credit rating change in period t+1 are more conservative in period t compared to firms that did not experience a credit rating change. Moreover, we test the relationship between conservatism in period t and a credit rating increase in period t+1 for investment grade firms compared to non investment grade firms. Based on our previous argument, we suggest that conservatism has the potential to reduce agency problems by constraining the ability of managers to 'inflate' net income. Constraining a managers opportunity to 'inflate' net income reduces risk. A reduction in risk may be rewarded by higher credit ratings. Therefore, we hypothesize that firms that practice conditional conservatism in period t will experience a credit rating increase in period t+1.

Our variables of interest are α_7 and α_8. α_7 is an interaction term that compares the difference between the conservatism levels of firms in period t that experienced a credit rating increase in period t+1 with firms that did not experience a credit rating change, the remainder of our sample. We expect that more financially conservative firms are rewarded with higher credit ratings. Therefore, we expect α_7 to be positive. α_8 is an interaction term that compares the difference between the conservatism levels of investment grade (IG) firms in period t that experienced a credit rating increase in period t+1 with firms that did not experience a credit rating change, the remainder of our sample. Based on our previous argument, we expect α_8 to be positive because investment grade firms are considered as firms with lower default risk compared to non-investment grade firms.

Investment Grade & Positive Change vs Investment Grade & Non_Positive Change

$$TACC = \alpha_0 + \alpha_1 CFO + \alpha_2 DCFO + \alpha_3 BS\_Cons + \alpha_4 IG + \alpha_5 BS\_Cons * IG + \alpha_6 Pos\_Cha + \alpha_7 BS\_Cons * Pos\_Cha + \alpha_8 BS\_Cons * IG * Pos\_Cha + \varepsilon \quad (7)$$

$$EAR = \alpha_0 + \alpha_1 RET + \alpha_2 DRET + \alpha_3 Basu\_Cons + \alpha_4 IG + \alpha_5 Basu\_Cons * IG + \alpha_6 Pos\_Cha + \alpha_7 Basu\_Cons * Pos\_Cha + \alpha_8 Basu\_Cons * IG * Pos\_Cha + \varepsilon \quad (8)$$

〈Table 1〉 Expected Sign

Coefficient	Expected Sign
α_5 of (3) & (4)	(+)
α_5 of (5) & (6)	(+) or (-)
α_8 of (7) & (8)	(+)
α_5 of (9) & (10)	(+) for Change 1 & 2

Where,

Pos_Cha : A dummy variable that takes 1 if credit rating increase from to t to t+1 period, 0 if credit rating decreased or remained the same

Additional Analysis

Finally, we divide our sample into 3 sub-samples to test if the conservatism levels of our different sub-samples (no change, credit ratings increases and decreases) are statistically different in period t for our three different groups. Change is a dummy variable that takes on the following properties.

$$TACC = \alpha_0 + \alpha_1 CFO + \alpha_2 DCFO + \alpha_3 CFO * DCFO + \alpha_4 Change_{k=1,2,3} + \alpha_5 DCFO * CFO * Change + \epsilon \quad (9)$$

$$EAR = \alpha_0 + \alpha_1 RET + \alpha_2 DRET + \alpha_3 RET * DRET + \alpha_4 Change_{k=1,2,3} + \alpha_5 DRET * RET * Change + \epsilon \quad (10)$$

Where,

1. Positive Change vs Negative Change (186 vs 53)
   Change1 : A dummy variable that takes 1 if credit rating increased from t to t+1 period, 0 if credit rating decreased.
2. Positive change vs no change (186 vs 942)
   Change2 : A dummy variable that takes 1 if credit rating increased from t to t+1 period, 0 if credit rating remained stable.
3. Negative change vs no change (53 vs 1208)
   Change3 : A dummy variable that takes 1 if credit rating decreased from t to t+1 period, 0 if credit rating remained stable.

Our variables of interest in equations (9) and (10) are α_5. The α_5 interaction term tests if there are statistically significant differences between the behavior of our three samples. In model 1 and 2, we expect the α_5 coefficient to be positive. We do not make assumptions about model 3 because of our small sample size.

Based on our arguments above[2], we expect to see the following signs for our coefficients illustrated in 〈Table 1〉. We are keen to find whether financially conservative firms are considered as safer investments with lower level of default risk hence, are rewarded with higher credit ratings. Since firms deeply care about their credit ratings, conservative reporting may be one option for those who wish to increase or retain credit ratings.

2) (1) & (2) capture the level of conditional conservatism for the whether BS and Basu model for our entire sample. (3) & (4) captures whether investment grade firms (Above A- and above) are more conservative compared to non-investment grade firms (BBB+ and below) credit ratings. (5) & (6) tests whether firms that experience credit ratings change are more conservative than firms that do not experience a credit ratings change. (7) & (8) tests whether firms that experience credit ratings increases are more conservative compared to firms with that experience a decreased credit ratings or firms with consistent credit ratings (model 1) (7) & (8) tests whether investment grade firms that experience credit ratings increases are more conservative compared to firms with that experience a decreased credit ratings or firms with consistent credit ratings (model 2) (9) & (10) are additional tests to add robustness to our main findings (3 sub-periods com- parison)

〈Table 2〉 Conditional conservatism sample selection by credit ratings

Panel A: Conditional Conservatism sample from 2002-2013					
Initial CR Sample					2,045
Excluding Post periods					(710)
Potential Sample					1,335
Excluding firms with no financial data available					(25)
Final Sample					1,310
Panel B: Sample selection by credit ratings					
CR scores	*CR*	*Obs*	*CR sores*	*CR*	*Obs*
17	AAA	35	8	BBB-	86
16	AA+	62	7	BB+	64
15	AA	88	6	BB	51
14	AA-	134	5	BB-	41
13	A+	99	4	B+	14
12	A	175	3	B	18
11	A-	144	2	B-	10
10	BBB+	150	1	Below -B	24
9	BBB	115	Total		1,310

3.2 Sample selection

All credit rating data is collected from TS-2000 and financial data is collected from DataGuide 5.0 or New KisValue. Financial Institutions are excluded from our initial sample, consistent with previous studies. Our sample period covers 2002 to 2013. All financial data is collected per calendar year. Financial Institutions are excluded from our initial sample, consistent with previous studies. Our sample period covers 2002 to 2013.

All financial data is collected per calendar year. 〈Table 2〉 illustrates our sample selection procedure. A total of KRX firm 2,045 were included in our initial sample. 710 post period observations were excluded and an additional 25 firms were excluded because no financial data was available for our conditional conservatism metrics, leaving a total of 1,310 firms. The sample distribution shown in Panel B is relatively normally distributed.

Ⅳ. Empirical Results

4.1 Descriptive Statistics and Pearson Correlation

Panel A in 〈Table 3〉 provides details about our sample's central tendency and standard deviations for all variables of interest. Our data is winsorized at the 1% level, consistent with previous studies. The results show that the mean (and median) of CFO and RET are positive, suggesting than on average firms are profitable. However, 22%(43%) of the sample firms experience negative CFO(Stock return) suggesting that there is a variation in the levels of firm profitability. Panel B shows our Pearson Correlations. The results show that RET* DRET(CFO*DCFO) is significantly positively correlated with EAR(TACC). Therefore, our sample firms are considered to be conservative.

〈Table 3〉 Uni-variate Analysis

Panel A: Descriptive Statistics				
Variables	Obs	Mean(Median)	Max(Min)	S.D
NI	1310	0.03(0.3)	0.22(-0.26)	0.08
TACC	1310	-0.02(-0.02)	0.22(-0.28)	0.09
CFO	1310	0.05(0.04)	0.30(-0.19)	0.08
RET	1310	0.29(0.17)	3.48(-0.83)	0.12
DCFO	1310	0.22(0)	1(0)	0.41
DRET	1310	0.43(0)	1(0)	0.49
*CFO*DCFO*	1310	-0.11(0)	1(0)	0.36
*RET*DRET*	1310	-0.12(0)	0(-0.83)	0.20

Panel B: Pearson Correlations						
	1.	*2.*	*3.*	*4.*	*5.*	*6.*
1. EAR	1					
2. TACC	0.53***	1				
3. CFO	0.38***	-0.57***	1			
4. RET	0.02	-0.07**	0.09***	1		
*5. RET*DRET*	0.32***	0.08***	0.22***	0.36***	1	
*6. CFO*DCFO*	0.21***	0.42***	0.66***	0.07***	0.18***	1

Variable Definition

Where,

TACC : Total accruals

CFO : Cashflow from operation

DCFO : A dummy variable that takes 1 if *CFO* is below 0, 0 otherwise

EAR : Net income scaled by prior year total assets

RET : 12 months cumulative stock returns

DRET : A dummy variable that takes 1 if *RET* is below 0, 0 otherwise

4.2 Multi-variate Analysis results

First, we examine the levels of conditional conservatism for our sample, firms that have acquired equity through public debt. Our variable BS__Cons 〈Table 4〉 in model 1 and 2 are statistically significant at the 5% and 10% level. The Basu__CS variable is statistically significant at the 1% level. The results suggest that overall our sample firms are financially conservative.

Next, we use the interaction term IG, a dummy variable to take on the value of 1 if a firm's credit rating is investment grade (above BBB+), 0 otherwise to establish if firms above the investment grade are more financially conservative compared to non-investment grade firms.

〈Table 5〉 shows that our coefficient of interest α_5 is positive, but not statistically significant for the BS and the Basu models. The results suggest that firms above the investment grade cut-off do not participate in more financial practices compared to non-investment grade firms. In hypothesis 1, we suggest that conditional conservatism can be considered as an accounting practice con-

〈Table 4〉 Conditional Conservatism regression on investment grade

Conditional Conservatism Models

BS Mode 1 : $TACC = \alpha_0 + \alpha_1 CFO + \alpha_2 DCFO + \alpha_3 CFO^* DCFO + \epsilon$ (1)

Basu Model 3 : $EAR = \alpha_0 + \alpha_1 RET + \alpha_2 DRET + \alpha_3 RET^* DRET + \epsilon$ (2)

BS Mode 2 : $TACC = \alpha_0 + \alpha_1 CFO + \alpha_2 DCFO + \alpha_3 CFO^* DCFO + \alpha_4 IG + \alpha_5 CFO^* DCFO^* IG + \epsilon$ (3)

Basu Model 4 : $EAR = \alpha_0 + \alpha_1 RET + \alpha_2 DRET + \alpha_3 RET^* DRET + \alpha_4 IG + \alpha_5 RET^* DRET^* IG + \epsilon$ (4)

		Ball and Shivakumar Model			Basu Model	
	Sign	Model 1	Model 2		Model 3	Model 4
Intercept	?	0.01*** (3.17)	-0.01 (-1.34)	*Intercept*	0.06 (18.05)***	0.03*** (6.44)
CFO	-	-0.59*** (-16.34)	-0.62*** (-17.10)	*RET*	-0.01 (-4.24)***	-0.01*** (-3.34)
D	-	-0.01 (-1.21)	-0.01 (-0.81)	*D*	-0.01 (-1.63)	-0.01* (-1.75)
BS_Cons	?	0.20** (2.48)	0.18* (1.70)	*Basu_Cons*	0.13*** (8.77)	0.11*** (6.18)
IG	?		0.03*** (5.97)	*IG*		0.03*** (5.94)
*BS_Cons*IG*	+		0.02 (0.15)	*Basu_Cons*IG*		0.01 (0.35)
F value		218.66***	143.39***	*F value*	57.74***	45.19***
Adj R^2		0.3328	0.3523	*Adj R^2*	0.1151	0.1444
Mean VIF		2.04	2.35	*Mean VIF*	1.77	2.09
Obs		1310	1310	*Obs*	1310	1310

〈Table 5〉 Credit rating change vs No change analysis

Conditional Conservatism Models

BS Model : $TACC = \alpha_0 + \alpha_1 CFO + \alpha_2 DCFO + \alpha_3 CFO^* DCFO + \alpha_4 Change + \alpha_5 DCFO^* CFO^* Change + \epsilon$ (5)

Basu Model : $EAR = \alpha_0 + \alpha_1 RET + \alpha_2 DRET + \alpha_3 CFO^* DRET + \alpha_4 Change + \alpha_5 RET^* DRET^* Change + \epsilon$ (6)

	Sign	BS Model		Basu Model
Intercept	?	0.01(3.15)***	*Intercept*	0.06(17.50)***
CFO	-	-0.61(-16.65)***	*RET*	-0.0.1(-4.20)***
D	-	-0.01(-1.16)	*D*	-0.01(-1.65)*
BS_Cons	?	0.19(2.33)**	*Basu_Cons*	0.12(8.32)***
Change	?	-0.01(-3.19)***	*Change*	-0.01(-2.74)***
*BS_Cons*Change*	?	0.02(1.79)*	*Basu_Cons*Change*	0.01(1.92)*
F value		139.75***	*F value*	38.28***
Adj R^2		0.3464	*Adj R^2*	0.1246
Mean VIF		1.82	*Mean VIF*	1.66
Obs		1310	*Obs*	1310

〈Table 6〉 Positive Change vs Non-Positive Change

Conditional Conservatism Models

$$TACC = \alpha_0 + \alpha_1 CFO + \alpha_2 DCFO + \alpha_3 BS\_Cons + \alpha_4 IG + \alpha_5 BS\_Cons * IG + \alpha_6 Pos\_Cha + \alpha_7 BS\_Cons * Pos\_Cha + \alpha_8 BS\_Cons * IG * Pos\_Cha + \varepsilon \quad (7)$$

$$EAR = \alpha_0 + \alpha_1 RET + \alpha_2 DRET + \alpha_3 Basu\_Cons + \alpha_4 IG + \alpha_5 Basu\_Cons * IG + \alpha_6 Pos\_Cha + \alpha_7 Basu\_Cons * Pos\_Cha + \alpha_8 Basu\_Cons * IG * Pos\_Cha + \varepsilon \quad (8)$$

		BS Model			Basu Model	
	Sign	Model 1	Model 2		Model 3	Model 4
Intercept	?	0.02*** (4.29)	-0.00 (-0.56)	*Intercept*	0.06*** (18.63)	0.03*** (6.95)
CFO	-	-0.61*** (-17.32)	-0.63*** (-18.08)	*RET*	-0.01*** (-3.61)	-0.01* (-1.95)
D	-	-0.01 (-1.20)	-0.00 (-0.45)	*D*	-0.01* (-1.71)	0.11*** (5.57)
BS_Cons	?	0.23*** (2.83)	0.17* (1.87)	*Basu_Cons*	0.12*** (7.49)	0.03*** (5.74)
IG	?		0.03*** (6.05)	*IG*		0.01*** (5.38)
*BS_Cons*IG*	?		-0.04 (-0.34)	*Basu_Cons*IG*		-0.01 (-0.38)
Pos_Cha	?	-0.08*** (-7.23)	-0.07*** (-6.28)	*Pos_Cha*	-0.07* (-192)	-0.07* (-1.74)
*BS_Cons*Pos*	+	0.87 (0.75)	0.21 (0.66)	*Basu_Cons*Pos*	0.01(0.21)	-0.05 (-0.98)
*Cons*IG*PC*	+		3.74*** (5.54)	*Cons*IG*PC*		0.12(2.15)**
F value		157.92***	112.16***	*F value*	45.76***	35.89***
Adj R^2		0.3748	0.4045	*Adj* R^2	0.1460	0.1808
Mean VIF		1.71	2.02	*Mean VIF*	1.94	2.33
Obs		1310	1310	*Obs*	1310	1310

Note) ① Variable Definition
TACC : Total accruals
CFO : Cashflow from operation
DCFO : A dummy variable that takes 1 if *CFO* is below 0, 0 otherwise
EAR : Net income scaled by prior year total assets
RET : 12 months cumulative stock returns
DRET : A dummy variable that takes 1 if *RET* is below 0, 0 otherwise
IG : A dummy variable that takes 1 if credit rating is investment grade(above BBB+), 0 otherwise
Change : A dummy variable that takes 1 if credit rating changed from to t to t+1 period
Pos_Cha : A dummy variable that takes 1 if credit rating increase from to t to t+1 period, 0 if credit rating decreased or remained the same
② *, **, *** denotes significance level at 10%, 5% and 1% respectively

sidered with the potential to increase accounting quality. Therefore, we would expect firms above the investment grade cut-off would have higher credit ratings than firms below the investment

〈Table 7〉 3 Sub-samples Comparison Analysis

BS Model

$$TACC=\alpha_0+\alpha_1 CFO+\alpha_2 DCFO+\alpha_3 CFO^{*}DCFO+\alpha_4 Change_{k=1,2,3}+\alpha_5 DCFO^{*}CFO^{*}Change+\epsilon \quad (9)$$

Sign	Model 1	Model 2	Model 3
Intercept	0.03(3.50)***	0.01(3.54)***	0.01(3.53)***
CFO	-0.66(-8.25)***	-0.61(-15.18)***	-0.61(-17.47)***
D	-0.04(-1.96)*	-0.01(-1.31)	-0.00(-0.23)
BS_Cons	0.32(1.85)*	0.25(2.83)***	-0.20(-2.54)**
Change	-0.09(-7.43)***	-0.08(-6.77)***	0.01(2.12)**
BS_Cons*Change	0.79(2.27)***	0.88(2.93)***	0.16(0.70)
F value	30.73***	130.22***	155.99***
Adj R^2	0.3844	0.3644	0.3808
Mean VIF	2.16	1.72	1.68
Obs	239	1128	1261

Basu Model

$$EAR=\alpha_0+\alpha_1 RET+\alpha_2 DRET+\alpha_3 RET^{*}DRET+\alpha_4 Change_{k=1,2,3}+\alpha_5 DRET^{*}RET^{*}Change+\epsilon \quad (10)$$

	Model 1	Model 2	Model 3
Intercept	0.06(8.65)***	0.06(16.36)***	0.05(17.11)***
RET	-0.01(-1.86)*	-0.01(-4.15)***	-0.01(-2.71)***
D	-0.02(-0.94)	-0.01(-1.76)*	-0.01(-2.13)**
Basu_Cons	0.14(2.85)***	0.11(6.95)***	0.11(7.06)***
Change	-0.09(-5.33)***	-0.07(-4.51)***	0.01(1.85)*
Basu_Cons*Change	0.01(0.23)	0.01(0.31)	-0.03(-0.76)
F value	22.83***	40.65***	28.60***
Adj R^2	0.3145	0.1496	0.1023
Mean VIF	2.70	1.93	1.59
Obs	239	1128	1261

Note) ① Variable Definition
3 sub-sample comparison,
1. Positive Change vs Negative Change (Model 1: 186 vs 53)
Change1 : A dummy variable that takes 1 if credit rating increased from t to t+1 period, 0 if credit rating decreased
2. Positive change vs no change (Model 2: 186 vs 942)
Change2 : A dummy variable that takes 1 if credit rating increased from t to t+1 period, 0 if credit rating remained stable
3. Negative change vs no change (Model 3: 53 vs 1208)
Change3 : A dummy variable that takes 1 if credit rating decreased from t to t+1 period, 0 if credit rating remained stable
② *, **, *** denotes significance level at 10%, 5% and 1% respectively

grade cut off. However, we do not find evidence to support this hypothesis.

〈Table 5〉 examines the relation between the levels of conditional conservatism in period t and credit ratings in period t+1. The results suggest that there is a positive relation between conservatism in period t and a credit ratings change in period t+1 for both the BS and Basu model at the 10% level. Therefore, firms that have experienced an increase or decrease in their credit

rating levels from period t to t+1 are marginally more conservative compared to firms with consistent levels of credit ratings. Our results find evidence consistent with hypothesis 2, suggesting that financial conservatism may influence credit ratings.

Next, we examine the relationship between conservatism in period t and positive credit rating changes in period t+1. Model 1 and 3 (α_7), are designed to capture if financial conservatism in period t has a statistically significant influence on a firm experiencing a positive credit rating increase in period t+1 for the BS a Basu models.

IG, A dummy variable that takes 1 if credit rating is investment grade(above BBB+), otherwise the value is added to model 2 and 4 (alpha 8) to capture the effect conservatism in period t on a credit rating increase in period t+1 for firms above and below the investment grade cut-off.

〈Table 6〉 shows that α_7 in model 1 and 3 is not statistically significant. The results suggest that firms that experience a credit ratings increase do not have higher levels of financial conservatism compared to firms that experience a credit rating decreased and firms with unchanged credit ratings. However, we find statistically significant results at the 1% level (Ball and Shivakumar) for model 2, and at the 5% (Basu) level for model 4 for investment grade firms in period t+1. Our results suggest that firms above the investment grade that experienced a CR increase in t+1 are more conservative compared to all other firms in period t(non-investment grade + positive change, investment grade + no change or negative change), consistent with hypothesis 2.

V. Additional Analysis

5.1 3 sub-samples comparison analysis

Next, we perform a battery of tests comparing the levels of conservatism of numerous firms. The purpose of these additional tests is to add robustness to our previous finding. In model 1, we compare positive Change with negative Change (186 vs 53); change1 is dummy variable that takes 1 if credit rating increased from t to t+1 period, 0 if credit rating decreased. In model 2, we compare positive change with no change (186 vs 942);

Change2 is a dummy variable that takes 1 if credit rating increased from t to t+1 period, 0 if credit rating remained stable. In model 3, we compare negative change with no change (53 vs 1208); Change3 is a dummy variable that takes 1 if credit rating decreased from t to t+1 period, 0 otherwise. Our variables of interest is the interaction term,α_5 that capturers the difference levels of conservatism for each group in period t. We expect α_5 to be positive in model 1 and 2.

〈Table 7〉 shows that only the Ball and Shivakumar models shows statistically significant results for Models 1 and 2, the Basu model. However, the remainder of the results are not statistically insignificant. The results for model 1 using the BS model is statistically significant at the 1% level, suggesting that firms that experience a positive CR change are more conservative compared to firms that experience a credit rating decrease / remain at constant CR level. Model 2 suggests that firms with positive CR change are more conservative compared to firms that do not experience a credit rating change. Model 3 comparing the levels of conservatism of firms that experience a

〈Table 8〉 Sensitivity Analysis

Ball and Shivakumar Model

$TACC = \alpha_0 + \alpha_1 CFO + \alpha_2 DCFO + \alpha_3 CFO * DCFO + \alpha_4 IG + \alpha_5 CFO * DCFO * IG + \epsilon$

	Sign	BS Model 1	BS Model 2	BS Model 3	BS Model 4	BS Model 5	BS Model 6
Intercept	?	-0.01 (-1.12)	-0.01** (-2.12)	-0.01*** (-2.70)	-0.02*** (-3.76)	-0.03*** (-3.78)	-0.03*** (-3.32)
CFO	-	-0.63*** (-17.42)	-0.62*** (-17.22)	-0.61*** (-17.03)	-0.61*** (-16.84)	-0.61*** (-16.89)	-0.60*** (-16.54)
D	-	-0.00 (-0.80)	-0.00 (-0.74)	-0.01 (-0.92)	-0.01 (-0.90)	-0.00 (-1.17)	-0.01 (-1.08)
BS_Cons	?	0.15 (1.58)	0.23** (2.12)	0.22** (1.97)	0.35*** (2.86)	0.63*** (3.82)	0.56*** (2.78)
IG_A+	?	0.03*** (7.33)					
IG_A-	?		0.03*** (7.17)				
IG_BBB	?			0.04*** (6.71)			
IG_BBB-	?				0.04*** (7.06)		
IG_BB+	?					0.05*** (6.44)	
IG_BB	?						0.04*** (5.29)
*BS_Cons*IG*	+	0.08 (0.75)	0.06 (0.54)	0.00 (0.02)	0.16 (1.26)	0.50*** (3.00)	0.39* (1.93)
F value		150.12** *	147.69** *	146.70** *	146.85** *	143.51** *	139.41** *
Adj R2		0.3629	0.3591	0.3575	0.3578	0.3525	0.3458
Mean VIF		2.00	2.33	2.44	2.69	4.21	5.74
Obs		1310	1310	1310	1310	1310	1310

Basu Model

$EAR = \alpha_0 + \alpha_1 RET + \alpha_2 DRET + \alpha_3 RET * DRET + \alpha_4 IG + \alpha_5 RET * DRET * IG + \epsilon$

	Basu Model 1	Basu Model 2	Basu Model 3	Basu Model 4	Basu Model 5	Basu Model 6
Intercept	0.04*** (8.57)	0.03*** (6.35)	0.03*** (5.11)	0.03*** (4.23)	0.02*** (2.87)	0.04*** (3.71)
RET	-0.01*** (-3.43)	-0.01*** (-3.30)	-0.01*** (-3.40)	-0.01*** (-3.56)	-0.01*** (-3.55)	-0.01*** (-3.86)
D	-0.01** (-2.03)	-0.01* (-1.95)	-0.01* (-1.88)	-0.01* (-1.83)	-0.01 (-1.64)	-0.01* (-1.85)
Basu_Cons	0.13*** (7.80)	0.12*** (6.53)	0.13*** (6.36)	0.14*** (6.38)	0.11*** (4.37)	0.16*** (5.55)
IG_A-	0.03*** (5.87)					
IG_BBB+		0.03*** (6.10)				
IG_BBB			0.03*** (5.22)			
IG_BBB-				0.03*** (4.33)		
IG_BB+					0.03*** (4.50)	
IG_BB						0.02*** (2.28)
*Basu_Cons*IG*	0.05 (1.11)	0.01 (0.41)	0.02 (0.86)	0.04 (1.56)	0.01 (0.56)	0.05 (1.55)
F value	50.89***	47.39***	45.53***	44.64***	40.59***	38.56***
Adj R2	0.1601	0.1505	0.1454	0.1429	0.1314	0.1255
Mean VIF	1.88	2.05	2.33	2.75	3.20	4.04
Obs	1310	1310	1310	1310	1310	1310

Note) ① Variable Definition
TACC : Total accruals
CFO : Cashflow from operation
DCFO : A dummy variable that takes 1 if CFO is below 0, 0 otherwise
EAR : Net income scaled by prior year total assets
RET : 12 months cumulative stock returns
DRET : A dummy variable that takes 1 if RET is below 0, 0 otherwise
IG : A dummy variable that takes 1 if credit rating is investment grade(above each grade), 0 otherwise
② *, **, *** denotes significance level at 10%, 5% and 1% respectively

credit ratings decrease with all other firms show insignificant results.

5.2 3 Sensitivity Analysis

We fail to find that above investment grade (BBB+) firms are more financially conservative compared to non-investment grade firms. However, firms close to the investment grade cut-off may be considered as having different levels of risk compared to junk bonds. Since investor types are classified into 1) risk averse, 2) risk indifferent, and 3) risk takers, different investors may perceive risk-reward differently; thus, we use a different level of risk to proxy 'investment grade'. Moreover, investment grade for long-term and short-term investments are generally different.

As a further sensitivity analysis, IG was replaced by 6 more additional dummy variables. In these regressions, IG is a dummy variable that takes 1 if a credit rating is above (A+, A-, BBB, BBB-, BB+, BB)[3], 0 otherwise.

〈Table 8〉 illustrates the results of our sensitivity analysis. The results suggests that majority of α_5 coefficients are insignificant, consistent with previous findings. However, BS_Cons*IG for BB+ and BB are statistically significant at the 1% and 10% level respectively, implying that firms above BB+ or BB are more conservative compared to firms with below these grades. However, none of α_5 coefficients for the Basu measures are significant.

Ⅵ. Conclusions

In this paper, we examine the relation between conservatism and credit ratings and credit ratings changes. Credit ratings are extensively used by bond investors, debt issuers, and governmental officials as a measure of a firm's default risk. There is a direct link between credit ratings and cost of debt because credit ratings are directly linked to bond yield. Accounting conservatism reflects a manager's tendency to recognize "bad news" in a timelier manner than "good news" (Basu, 1997). Accounting conservatism has the potential to reduce the opportunistic behavior managers, and is considered to be an important accounting practice that validates financial reporting. Moreover, auditors generally prefer conservative reporting due to the potential litigation risk (Lys and Watts, 1994).

In this paper, we suggest the following association between credit ratings and conditional conservatism. Conditional conservatism is an accounting practice associated with reducing a manager's ability to 'inflate' net income. Constraining managers ability to influence dividend has the potential to reduce default risk. Credit rating agencies issue higher credit ratings to firms with lower default risk. Firms care deeply about maintaining or increasing their credit ratings. Therefore, there may be an association between conservative reporting credit rating levels / credit ratings changes.

Our results suggest that firms that borrow equity in the form of public debt are overall conditionally conservative. When we compare the levels of conservatism of firms above and below the investment grade cut off level, we find that investment grade cut-off level firms do not participate in higher levels of credit ratings compared to non-investment grade firms. However, we find that there is a positive relationship between financial conservatism in period t and a credit rating change in period t+1 for firms above the investment grade threshold. This results suggest that firms above

3) For further robustness, we replace IG with a dummy variable of every credit rating above. However, All variables of our interest show insignificant results.

the investment grade threshold care more deeply about credit ratings. Firms below the investment-grade threshold have limited access to investors because of government or self-imposed limitations. Therefore, firms above A- have a higher incentive to practice conservatism compared to firms below the investment grade threshold, and may be rewarded with an increase in credit because of conservative accounting practices.

Credit ratings are directly linked to bond yield, therefore a firm will have a lower cost of debt if credit ratings increase. We find a statistically significant relationship between conservatism in period t+1 and credit rating increases for investment grade firms. Our results suggest that firms with higher levels of conservatism are rewarded with higher credit ratings, by proxy, lower cost of debt. Our robustness checks support our analysis suggesting that there is a statistically significant difference in the levels of conservatism in period t for firms that experience an increase in their credit ratings in t+1 compared to firms that experience a credit ratings decrease, or have a consistent credit rating level. Taken together, these results suggest credit ratings agencies may financially reward conservative firms with a credit rating's increase.

A limitation of our research is that the relationship between conditional conservatism and credit ratings / credit ratings changes may not be applicable to countries with different legislative and economic frameworks. Further research may include comparative analysis of the relationship between credit ratings / credit ratings changes in Korea compared to the U.K. or the U.S.A.

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<Abstract>

보수주의적 재무보고가 신용등급에 영향을 미치는가? : 회사채를 발행한 한국 유가증권 상장기업 분석

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본 연구는 보수주의적 재무보고가 차기 신용등급에 미치는 영향을 검증하는 것을 목적으로 한다. 1997년 외환위기 이후 신용등급은 투자자에 있어 매우 중요한 지표로 인지되어 왔고 기업들은 이를 유지하거나 상향 조정시키기 위하여 많은 노력을 투입하는 것으로 알려져 있다. 한편 재무보고에 있어 보수주의는 이익의 질을 향상 시키는 오랜 관습으로 인식되어 왔으며(Watts, 2003), 손실을 이익보다 더 적시에 인식함으로써 보다 신뢰할 수 있는 이익 정보의 제공을 돕는 역할을 하는 것으로 알려져 있다. 보수주의적 재무보고는 주주들에게 배분될 수 있는 이익잉여금을 낮게 보고 하도록 유도하기 때문에 기업들은 보다 많은 실제 이익을 기업에 유보할 수 있고 결과적으로 이는 채무불이행 위험(default risk)을 낮추는 역할을 할 수 있다. 따라서 신용평가기관이 만약 기업의 보수주의적 재무보고를 인지한다면 높은 신용등급을 부여할 가능성이 높다. 본 연구는 2002년부터 2013년까지 국내 유가증권 상장기업 중 회사채를 발행한 기업들을 대상으로 보수주의가 신용등급에 미치는 영향을 분석하였다. 구체적으로, Basu(1997)와 Ball and Shivakumar(2005)의 조건부 보수주의 모형(conditional conservatism model)을 이용하여 신용등급 및 신용등급 변화와 보수주의 수준을 관찰하였다. 연구결과를 요약하면 다음과 같다. 먼저 기업의 투자등급에 속하는 신용등급을 가진 기업들이 투기등급을 가진 기업들보다 더 보수적이라는 증거는 찾지를 못했다. 추가분석의 민감도 분석에서도 전반적으로 일관적인 결과가 관찰되었다. 둘째, 투자등급에 속하는 기업들의 신용등급이 상향조정된 경우 보수주의 수준이 높은 것으로 나타났다. 셋째, 표본을 신용등급 상향조정 그룹, 하향조정 그룹, 변화가 없는 그룹으로 구분하여 분석한 결과에서는 신용등급이 상향조정된 기업들이 하향조정 혹은 변화가 없는 기업에 비해서 보수주의 수준이 유의적으로 더 높은 것으로 나타났다. 본 연구의 결과는 보수주의의 수준이 기업의 신용등급을 예측하는데 추가적인 정보를 제공하는 지표로써 활용될 수 있다는 것을 발견했다는 점에서 의미가 있다.

핵심 주제어: 조건부 보수주의, 신용등급, Basu 모형, Ball and Shivakumar 모형, 투자등급

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