THE EFFECT OF ACCOUNTING CONSERVATISM ON THE PRICING OF NEWLY ISSUED BONDS: EVIDENCE FROM KOREA

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ABSTRACT

This study investigates whether an issuer's accounting reporting attributes have impact on the initial returns of bond offerings in emerging markets of Korea. In particular, we focus on the critical role of accounting conservatism on corporate straight bond pricing. Empirical results show that in general the initial returns for newly issued bonds tend to be negative (overpriced). More importantly, the degree of overpricing positively relates to the level of conditional accounting conservatism, suggesting that accounting conservatism mitigates information asymmetry in public debt financing. In addition, we find that this effect is more pronounced for bond issuances with poor credit ratings. It indicates that conservative accounting in the form of timely profit (or loss) recognition improves contracting efficiency in debt market by reducing cost of debt capital. This study addresses an important gap in the literature by building richer insights on how the approach to accounting policies determine the pricing strategy of corporate bonds at an early stage in condition to the focal firm's credit risk.

Keywords: Accounting conservatism, Debt market, Bond pricing, Information asymmetry.

INTRODUCTION

A substantial body of literature has long been interested in identifying the underpricing practice at initial public offerings (IPO) in equity markets (Rock 1986; Beatty & Ritter 1986; Benveniste & Spindt 1989; Allen & Faulhaber 1989). Underpricing represents the phenomenon of listing an IPO at a price below its real value in the capital market. While scholars have well extended our knowledge on the pricing strategies within the equity market, empirical findings on the initial returns of corporate debt offerings are relatively limited to date. Despite the fact that accounting information is crucial for public debt investors to reduce information asymmetry around firms and evaluate default risk of issuers, the models of IPO underpricing in the fields of finance do not incorporate the attributes of accounting information on the corporate bond pricing.

Debt investors whose claims are fixed on corporate assets have different payoff functions from shareholders. In addition, as opposed to the stock market, the bond market is dominated by well-informed institutional investors. Given that equity markets and debt markets react in their own distinct manners under the same market conditions, it is important to understand the determinants to the pricing behaviors of debt markets as in equity markets. To fill this void in the literature, we attempt to examine whether conservative financial reporting plays a role as an indicator to the degree of issuer's information risk by alleviating information asymmetries, which influences the pricing of new bond issues in the emerging markets of Korea. In doing so, we blend established theories from information asymmetry models to develop a

novel way to understand the underlying mechanisms of accounting conservatism influencing corporate bond pricing behaviors.

The stock IPO literature establishes some theoretical models, such as information models, signaling models and liquidity models, to explain the underpricing phenomenon. Most common explanations for underpricing of equity offering relate to information problems among market participants (informed vs. uninformed investors). The information model argues that underpricing occurs to allow uninformed investors to participate in IPO market and to compensate them for the winner's curse problem (Rock 1986). The signaling camp, on the other hand, focus on the information asymmetry between investors and issuers and explain that better-quality issuers use an underpricing mechanism to distinguish themselves from other issuers to investors who lack information (Allen and Faulhaber 1989).

While existing models in IPO settings suggest that information problems are critical factors to the pricing of both stock and bonds, prior studies find opposite evidence in bond markets to stock IPOs - the existence of overpriced bonds compared to underpriced stocks (Datta et al. 1997; Matsui 2006; Cai et al. 2007). Datta et al. (1997) find that the initial returns are rather negative (overpricing) for U.S. bond offerings of investment grade while those are positive (underpricing) for speculative grade. Their findings are consistent with equity IPO models given that underpricing does not occur in markets where information asymmetry across investors is limited. Because the bond market is dominated by well-informed institutional investors as opposed to the stock market, information asymmetry is minimal among the bond market investors. Similarly, Cai et al. (2007) show that significant underpricing is only found on speculative-grade bond IPOs and for financially risky firms.

While the empirical results of prior research are largely based on the debt offerings of U.S. firms, Matsui (2006) reports a systematic overpricing for all ratings classes in the Japanese bond market, which may be attributable to the underwriting competition among security companies. Similar to Matsui (2006), Heo et al. (2017) report that newly issued corporate bonds in Korean market are on average overpriced and the degree of overpricing is associated with the information asymmetry surrounding the issuers. Specifically, the level of overpricing is related to bond offering size, credit ratings and maturity of bonds.

Taken together, previous studies provide mixed evidence and arguments of the existence of under or overpricing in the debt market, particularly without taking the institutional differences across macro environments into account. Moreover, prior work does not consider the accounting reporting policy of issuers which plays a critical role of mitigating information asymmetry and reducing cost of debt capital (Zhang 2008). Therefore, we offer a novel approach to fill this gap in the literature by focusing on accounting conservatism, in the form of timely loss recognition, which reduces information asymmetry and thereby increasing the efficiency of debt contract.

Accounting conservatism is the firm's tendency to require a stricter verification for recognizing good news as gains than for bad news as losses (Basu 1997; Watts 2003a). Conservative firms recognize negative economic news more quickly in earnings than positive news in financial statements. It is well documented that accounting conservatism benefits firms by alleviating information asymmetries, reducing agency problems, increasing the efficiency of debt contracts, and mitigating litigation costs (Watts 2003; Ball & Shivakumar 2005; LaFond & Watts 2008; LaFond & Roychowdury 2008). Building on this perspective, we postulate that more conservative reporting firms benefit from lower cost of debts at their bond issuance by reducing information asymmetry and improving contracting efficiency in debt markets. On the other hand,

if the accounting information of the firm has already been fully reflected in the calculation of the bond rating, conservative accounting practice of issuers does not have additional effect for bond investors on the pricing of bond offering. Additionally, if conservative reporting policy leads to lower default risks to creditors by adopting a higher standard in recognizing gains than losses, conservatism will be more beneficial to firms with low credit rating than high credit rating firms.

We use a data set of 919 corporate bond initial offerings listed in Bloomberg's fixed income league tables over the period of 2011– 2014. Results show that initial returns in Korean bond market is on average overpriced. As a proxy for conditional conservatism, we use Khan and Watts's (2009) firm-year conservatism measure. Empirical results show that issuers who had more conservative accounting reporting policies have a tendency of overpricing at bond issues. It suggests that firms who recognize bad news in a timelier manner would take advantage of the lower cost of debt by reducing information risk.

This study contributes to the literature in several ways. First, this study contributes to the IPO literature by empirically testing the effect of issuers' accounting reporting practice on initial returns of public debt offerings. Even though creditors have different asymmetric payoff functions from shareholders, the literature on IPO patterns in debt financing has not been well investigated. Recently, a few studies have focused on the initial returns of corporate debt offerings and examined the factors affecting the returns using U.S. data. In this respect, we provide additional evidence of the information asymmetry problem in public debt market.

Second, few existing models of debt IPO have incorporated accounting reporting quality as a determinant of corporate bond pricing. Consistent with the signaling view, Liu and Magnan (2014) show that conditional conservative reporting is positively related with the underpricing of newly issued U.S. bonds. However, the Korean bond market has its distinctive features where it largely consists of institutional investors, indicating that bond investors have the professional capability to evaluate public disclosure quality of issuers. Under a different institutional setting compared to the U.S. markets where overpricing occurs in emerging markets of Korea, we propose that conditional conservatism will be associated with greater overpricing of newly issued corporate bonds. Given that information risk is a critical factor in bond pricing, we provide empirical results that support the information theory, which argues that accounting conservatism plays an efficient contracting role in public debt market.

The remainder of the paper proceeds as follows. In section 2, we review the relevant literature. We then develop our hypotheses in section 3 followed by the explanation of sample selection procedures and the methodology used to test our hypotheses in section 4. In section 5, we present empirical results. Finally, we conclude with a brief summary in Section 6.

LITERATURE REVIEW

Theory of Underpricing Phenomenon

Many prior studies attempt to identify the antecedents to the prevalent practice of underpricing (the negative return on the first day of trading) in equity initial public offering (Rock 1986; Beatty & Ritter 1986; Benveniste & Spindt 1989; Allen & Faulhaber 1989). Researchers offer several theoretical models (information models, signaling models and liquidity models) to explain the underpricing phenomenon. Information model arguments explain the occurrence of underpricing in stock IPOs as a result of information asymmetry among capital market participants. According to Rock (1986), because some stock market investors are

relatively well informed while others are left with little information, issuers are incentivized to underprice their stock to attract uninformed investors and induce their participation in the new issue market. Similarly, Beatty and Ritter (1986) shed light on the relationship between information and stock market pricing strategies by arguing that ex-ante uncertainty about the price of a new equity results in underpricing.

In the signaling model, better quality firms use underpricing as a signaling mechanism to distinguish themselves from lower quality firms (Allen & Faulhaber 1989). Investors understand that the initial underpricing costs can be recovered only by better performers who have the capabilities to build reputation with discounted stock prices and, consequently, set a higher price at seasoned offerings. Benveniste & Spindt (1989) argues that as investors are more informed than the issuers, firms propose the underpricing to induce the information revelation from the informed investors in the book-building process.

Compared to IPO studies on the equity market, empirical findings on the initial returns of corporate debt offerings are relatively understudied. To the best of our knowledge, only a few studies have focused on the initial returns of corporate debt offerings and examined the factors affecting the returns using U.S. data. For example, Datta et al. (1997) find that IPOs of speculative grade (junk) bonds are underpriced while those rated investment grades are overpriced. In a more recent work, Cai et al. (2007) document that underpricing arises in both speculative-grade debt IPOs and seasoned bond offerings (SBOs), and the degree of underpricing is more pronounce for high yield corporate bonds in the U.S. market. These results, although inconsistent, are largely supported by the information theory in equity markets.

While studies that use U.S., data provide mixed evidence on the underpricing phenomenon, research using other institutional contexts seem to provide more coherent evidence. For instance, Matsui (2006) reports a systematic overpricing for all ratings classes in the Japanese bond market where underwriting competition is quite high among security companies. Similar to the Japanese setting, there are intense competitions among underwriting firms in the Korean capital market. Because Korean bond markets are characterized as a short supply of long-term bonds issued by large companies, the primary corporate bond market tends to be a seller's market in which institutional investors try to buy newly issued bonds. As a result, to accomplish the deals, security firms have a tendency to underwrite corporate bonds at a low interest rate (higher price) and sell unsold bonds later at a high interest rate (lower price) to institutional investors in the secondary market.

Taking advantage of this unique setting, Heo et al. (2017) report that corporate bonds are overpriced and the degree of overpricing is associated with information asymmetry surrounding the issuers. In their paper, the authors show that the level of overpricing is related with bond offering size, credit ratings and maturity. Nevertheless, their paper does not take into account the information reporting policy of issuers which can heavily affect information risk. Building on research in this domain, we extend prior work by examining the relation between conservative accounting reporting and overpricing of newly issued corporate bonds in an institutional setting which is different from the U.S market.

Accounting Conservatism and Information Asymmetry

Conditional accounting conservatism refers to the propensity to require higher verification to recognize good news as gains than to recognize bad news as losses in financial statements (Basu 1997). As debtholders' payoffs are an asymmetric function of firm value, prior studies suggest that creditors demand conservative reporting for timely information in order to

control their default risks. Zhang (2008) finds that firms with a more conservative reporting practice are less likely to violate a covenant over the life of a loan, conditional on experiencing a negative shock. Biddle et al. (2013) document that asymmetric timeliness is associated with lower estimated bankruptcy risk. Hence, these studies suggest that accounting conservatism reduces information asymmetry among capital market participants and facilitates contracting (Ball et al. 2008).

As a reward for a higher degree of accounting conservatism, creditors offer a lower cost of debt (Ahmed et al. 2002; Tan 2013). Ahmed et al. (2002) find that a greater level of accounting conservatism is related with lower cost of debt and this relation is more pronounced when firm's leverage is high. This suggest that creditors tend to demand a higher degree of accounting conservatism for firms with high information asymmetry than for those with low information asymmetry. Our paper borrows theory from information asymmetry models to provide a thorough understanding of the underlying relationship between accounting policies and the pricing of debt offerings.

HYPOTHESIS DEVELOPMENT

While prior research extends our knowledge on the role of accounting conservatism on loan contracts, relatively little work has been done investigating those effects on public debt markets. Due to the different features of public and private debts, agency problems between lenders and borrowers are more severe for public bonds than for private bank loans. Among these agency related market frictions, information asymmetry is known to be one of the major problems. Private debt providers can easily access borrowers' private information via a debt covenant, whereas bondholders have limited access to private information. Thus, accounting numbers in financial statements are important resources to bondholders in evaluating the issuers' default risks.

When firms report financial numbers taking conservative measures, they recognize negative economic news more quickly in earnings than positive news in financial statements (Basu 1997). This asymmetric timeliness of recognizing earnings by adopting a higher standard for recognizing gains than losses leads to lower default risks to creditors. Prior literature report that accounting conservatism benefits debt holders by mitigating conflicting interests between borrowers and investors (Holthausen and Watts 2001; Watts 2003). According to information models, a greater level of accounting conservatism lowers risk by tightening dividend policies, which leads to lower cost of debt (Ahmed et al. 2002).

Contrary to this prediction, however, researchers in the signaling camp argue that conditional conservative reporting is positively related with the underpricing of newly issued U.S. bonds. For example, Liu and Magnan (2014) show in their empirical results that issuers with low information risk experience a greater degree of underpricing in order to distinguish themselves from issuers with higher information risk. Mixed results between the contrasting two perspectives of information models and signaling models have yet came to a consensus. In an attempt to provide more insight towards explaining this horserace, this paper takes into account the potential effect of heterogeneity in bond ratings on the empirical analyses.

We test the validity of information arguments in a setting where bond ratings are rather homogeneous due to particular institutional environments and, thus, are controlled for in the empirical analysis. In contrast to the U.S. market, the Korean bond market offers a unique setting where it largely consists of institutional investors, indicating that bond investors have professional capabilities to evaluate the public disclosure quality of issuers. Therefore, in a

setting where overpricing occurs, we predict that conditional conservatism represents low information risk and, hence, will be associated with greater overpricing of newly issued corporate bonds. Building upon the theoretical development of accounting conservatism mechanisms and information arguments, we posit that the benefits from conservatism reporting will be reflected in the pricing of newly issued bonds offering. Because cost of debt and bond prices typically exhibit an inverse relationship, we hypothesize that firms with a greater degree of conditional conservatism will be associated with overpricing of newly issued corporate bonds. We argue that conservative accounting policies reduce information asymmetry and improve contracting efficiencies in debt markets. The first hypothesis is stated as follows:

Hypothesis 1: *The overpricing of bond offering is positively associated with the degree of conservative accounting.*

Given that conservatism reporting leads to lower information risks to creditors by adopting a higher standard for recognizing gains than losses, we argue that conservative reporting should be more beneficial to firms with high credit risk than those with low risk. Colloquially speaking, bonds with lower credit ratings are more likely go into default, causing large losses to bondholders. Accordingly, creditors will demand a higher cost of debt for firms with high credit risk than those with low credit risk. Therefore, we posit that the association between the overpricing and accounting conservatism is more salient in bonds with high credit risk than in those with low credit risk. The second hypothesis is stated as follows:

Hypothesis 2: *The positive association between the overpricing and accounting conservatism is more pronounced in bonds with high credit risk than in those with low credit risk.*

RESEARCH DESIGN

Data and Sample Selection

We use a sample of Korean domestic corporate bond offerings over the period of 2011-2014. We collected detailed bond data (i.e., credit ratings, maturity, issue amount, the names of underwriters and underwriting fee) from Bloomberg's fixed income league tables. The data on daily closing prices of bonds in the secondary market are obtained from Korea Asset Pricing (KAP). Other financial data has been obtained from the TS2000. We impose the following criteria to include the final sample: (1) bonds issued by industrial firms; (2) bonds with public placements; and (3) bond issues that are filed a registration statement to the Financial Supervisory Service (FSS) in Korea.

Eliminating observations with missing data, the final sample consists of 919 bond offerings issued by 156 firms. We winsorize all continuous variables at the top and bottom one percent levels to mitigate outlier effects.

Measurement

Overpricing

The degree of overpricing is measured as the excess return of the individual bond over the return on a bond index during the same period. First, we compute raw returns for individual bonds. Bond return over *n* days from the issue day *t* is:

$$BR_{in} = (P_{t+n} - P_t)/P_t \tag{1}$$

where P_t is the priced on the date t, and P_{t+n} is the price at the next transaction after n days. Both prices are expressed as the sum of clean price and accrued interest. Then, we calculate the cumulative index return as the benchmark over the n days starting on the issue day t as follows:

$$CR_{in} = (INDEX_{t+n} - INDEX_t)/INDEX_t \tag{2}$$

where $INDEX_t$ is the index return for the Korea Asset Pricing Index with the same rating and maturity. Lastly, to calculate market-adjusted returns, we compute the excess return over n days for individual bond i as follows:

$$MAR_{in} = BR_{in} - CR_{in} \tag{3}$$

where $CR_{i,n}$ is the cumulative index return on the Korea Asset Pricing over the n days from issue day t based on rating and maturity. Thus, when the excess return over n days is negative, it implies that issuers experience overpricing at the time of bond issues.

Conditional Conservatism

Following Khan and Watts (2009), we use a firm-year specific proxy of accounting conservatism. The estimation of CSCORE is based on the Basu (1997) model. When firms adopt asymmetric standards of verification of losses and gains (conditional conservatism practices), their earnings capture bad news in a timelier manner than good news. The coefficient β_{2it} represents timeliness in capturing good news, and the coefficient β_{3it} measures the difference in sensitivity earnings to bad news and good news. Thus, if firms adopt accounting conservative reporting, $\beta_{3it,}$ is expected to be positive and significant.

$$X_{it} = \beta_{0t} + \beta_{1t}D_{it} + \beta_{2it}R_{it} + \beta_{3it}D_{it}R_{it} + \varepsilon_{it} \tag{4}$$

where X is net income, deflated by market capitalization at the beginning of the period, R is the stock rate of return, and D is a dummy variable that equals 1 when R is negative and 0 otherwise.

Then, the firm-year-specific coefficients β_{2it} (timeliness of good news) and β_{3it} (incremental timeliness of bad news over good news or conditional conservatism) are expressed as a linear function of firm-specific characteristics (size, market-to-book and leverage).

$$GSCORE_t = \beta_{2it} = \mu_{0t} + \mu_{1t}MV_{it} + \mu_{2t}MTB_{it} + \mu_{3t}LEV_{it} \tag{5}$$

$$CSCORE_t = \beta_{3it} = \lambda_{0t} + \lambda_{1t}MV_{it} + \lambda_{2t}MTB_{it} + \lambda_{3t}LEV_{it} \tag{6}$$

where MV is the natural log of the market value, MTB is the market-to-book equity ratio, and LEV is the debt-to-asset ratio at the beginning of the year. The coefficients of β_{2it} and β_{3it} replaced by equations (5) and (6), respectively, lead to the following empirical model:

$$X_{it} = \beta_{0t} + \beta_{1t}D_{it} + R_{it}(\mu_{0t} + \mu_{1t}MV_{it} + \mu_{2t}MTB_{it} + \mu_{3t}LEV_{it}) \tag{7}$$

$$+D_{it}R_{it}(\lambda_{0t}+ \lambda_{1t}MV_{it} + \lambda_{2t}MTB_{it} + \lambda_{3t}LEV_{it})$$
$$+ (\delta_{1t}M_{it} + \delta_{2t}MTB_{it} + \delta_{3t}LEV_{it}+\delta_{4t}D_{it}MV_{it}+ \delta_{5t}D_{it}MTB_{it} + \delta_{6t}D_{it}LEV_{it}+ \varepsilon_t$$

We use the measure of conservatism, CSCORE, using equation (6) with the estimated coefficients $\lambda_{0t,}$ $\lambda_{1t,}$ $\lambda_{2t,}$ and λ_{3t} from equation (7). Thus, the higher CSCORE means that firms have more conservative accounting reporting practices.

Model Specification

We examine the effect of the conservative reporting policies on the initial returns of corporate straight debt offering by estimating the following regression model.

$$MAR_{in} = \alpha+\beta_{1t} CSCORE_{it}+ \beta_{2t}Issuesize_{it}+ \beta_{3t}Maturity_{it} + \beta_{4t}Rating_{it} + \beta_{5t}Fee_{it}$$
$$+ \beta_{6t}Competition_{it} + \beta_{7t}Reputation_{it} + \beta_{8t}CFO_{it} +Year \qquad (8)$$
$$+ Industry+ \varepsilon_t$$

The main variables of interest are the level of conditional conservatism (*CSORE*). *CSCORE* is the firm-year specific measure of accounting conservatism by Khan and Watts (2009). We predict that firms with a higher level of conditional conservatism will exhibit more overpricing for newly issued bonds by reducing information risk to investors in debt markets (H1). Thus, we expect a negative coefficient on *CSORE*: $\beta_1 < 0$.

In model (8), we include several control variables. Following prior literature, we control for the bond specific characteristics, such as the amount of bond offerings (Issuesize), maturity (Maturity), and bond rating (Rating). The offering size is inversely related to the degree of ex ante uncertainty (Beatty and Ritter 1986). As the size of the bond offering relates to the aftermarket liquidity, it is related to the level of underpricing (Ellul and Pagano 2006). Since bond rating from an independent rating agency indicates the quality of the issues, higher rated bonds should be less underpriced than junk bonds (Datta et al. 1997).

Next, we control for the effect of an underwriter's characteristics on bond pricing: If underwriter compensation (Fee), the number of syndicate members (Competition), and underwriters' reputation (Reputation) affect the quality of bond and play roles of reducing information asymmetry, the degree of overpricing will be positively associated to the underwriter reputation (Datta et al. 1997; Matsui 2006). We also control for issuer's default risk with cash flows from operations (CFO). We further include fixed effect dummies by year and industry.

Hypothesis 2 predicts that conservative reporting is more beneficial to firms with low credit risk because a higher standard towards recognizing gains than losses plays a role in reducing default risks to creditors. Thus, in model (9), the anticipated negative effect of conservatism (CSCORE) and initial returns of bonds (MAR) will be more pronounced for bonds with low credit ratings. Thus, we expect a negative coefficient on the interaction terms of CSCORE $\times$ LowRating: $\alpha 4 < 0$.

$$MAR_{in} = \alpha+\beta_{1t} CSCORE_{it}+ \beta_{2t}LowRating_{it} \times CSCORE_{it}+ \beta_{3t}LowRating_{it}$$
$$+ \beta_{4t}Maturity_{it} + \beta_{5t}Rating_{it} + \beta_{6t}Fee_{it} + \beta_{7t}Competition_{it} \qquad (9)$$
$$+ \beta_{8t} Reputation_{it\ t} + \beta_{9t}CFO_{it} +Year$$
$$+ Industry+ \varepsilon_t$$

where *LowRating* is an indicator variable for bonds rated below A.

RESULTS

Descriptive Statistics

Table 1, Panel A, summarizes the descriptive statistics for the sample of 919 newly issued bonds. The average degree of conditional conservatism is -0.0014. The mean value of credit rating (Rating) is 6.2, representing A+ rating.

Table 1
DESCRIPTIVE STATISTICS

Panel A: Descriptive statistics of variables

Variables	Mean	Std dev	Min	Median	Max
CSCORE	0.00	0.01	-0.04	0.00	0.06
Issuesize (billion won)	10.40	7.67	1.00	10.00	50.00
Maturity (years)	4.09	2.18	1.00	3.00	20.00
Rating	6.20	2.20	1.00	6.00	10.00
Fee (billion won)	0.03	0.01	0.00	0.03	0.22
Competition	2.05	1.36	1.00	2.00	9.00
Reputation	8.99	4.55	0.10	8.75	16.60
CFO	0.06	0.10	-0.16	0.06	1.02

CSCORE is a conservatism measure of Khan and Watts (2009) metrics. Issuesize is the amount of bond offerings at issues. Maturity is the number of years of bond maturity. Rating is decile portfolio of bonds by credit rating. The variable of Rating has a value of 10 for bonds with AAA rating, 9 for bonds with AA+, etc. Fee is underwriting fee in basis points. Competition is the number of syndicate members. Reputation refers to underwriter reputation computed as the market share of lead underwriter. CFO is operating cash flow deflated by total assets at the beginning of the year. Big4 is an indicator variable that equals one when firms are audited by Big 4 accounting firms.

Panel B: Pearson correlations of Key Variables

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CSCORE	1							
(1)								
Issuesize	-0.40							
(2)	(0.00)							
Maturity	-0.45	0.18						
(3)	(0.00)	(0.00)						
Rating	-0.73	0.43	0.58					
(4)	(0.00)	(0.00)	(0.00)					
Fee	0.28	-0.12	-0.11	-0.35				
(5)	(0.52)	(0.00)	(0.00)	(0.00)				
Competition	-0.22	0.30	0.27	0.27	-0.13			
(6)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)			
Reputation	-0.21	0.11	0.15	0.27	-0.14	-0.07		
(7)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.03)		
CFO	-0.28	0.10	0.17	0.22	-0.10	0.08	0.13	
(8)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	
MAR	0.08	-0.17	-0.05	-0.10	-0.01	0.03	0.02	-0.01
(9)	(0.01)	(0.00)	(0.10)	(0.00)	(0.85)	(0.44)	(0.54)	(0.84)

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

Table 1, Panel B shows Pearson correlation coefficients for the variables that are used in the regressions. Firm-year conditional conservatism measure is positively correlated with abnormal returns.

Table 2, Panel A presents the initial returns of bond offerings over the first, two, three, four and five trading days. The mean market adjusted return on the first trading date is -5.4 bp, suggesting that newly issued bonds in Korea are on average overpriced. The degree of overpricing steadily disappears but still exists even after day 5 of the issuance date. Consistent with Matsui's (2006) report that newly issued bonds in Japanese market tend to be overpriced and the overpricing is more pronounced for issues with better ratings, our results show that the overpricing phenomenon of newly issued bonds is also not uncommon in Korea.

Table 2 INITIAL RETURNS					
Panel A: Initial-Day Bond Excess Returns (MAR)					
Trading Days	Number	Mean		Median	Standard Deviation
Days 0	934	-4.95		-1.00	0.11
Days 0 to 1	934	-5.38		-1.00	0.12
Days 0 to 2	934	-5.17		-1.20	0.13
Days 0 to 3	934	-4.96		-0.49	0.13
Days 0 to 4	934	-4.93		-0.59	0.15
Days 0 to 5	934	-4.67		-0.26	0.16
MAR is market-adjusted return on date t that is calculated as the raw return for bond over n days for new issues minus cumulative return on the Korea Asset Pricing index based on rating and maturity.					

Panel B: Number of issues for each rating class									
High rating grade								Low rating grade	
AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-
83	56	134	161	146	133	120	36	62	3

Panel C: Initial returns by credit rating				
Variables	High rating grade (n=869)	Low rating grade (n=65)	Tests of difference in means	
	Mean	Mean	t-statistic	
MAR	-0.059	0.015	0.074	***
CSCORE	-0.003	0.02	0.024	***
ROA	0.027	-0.018	-0.045	***
LEV	0.537	0.709	0.172	***
LOSS	0.209	0.615	0.406	***
CFO	0.067	0.017	-0.050	***
Big4	0.945	0.785	-0.160	***
MAR is market-adjusted return on date t that is calculated as the raw return for bond over n days for new issues minus cumulative return on the Korea Asset Pricing index based on rating and maturity. CSCORE is a conservatism measure of Khan and Watts (2009) metrics. ROA is the return on total assets at the beginning of fiscal year. LEV is liabilities deflated by the beginning total assets. LOSS is an indicator variable for firms reporting losses in the preceding year. CFO is operating cash flows deflated by the beginning total assets. Big4 is an indicator variable that equals one when firms are audited by Big 4 accounting firms.				

Panel B of Table 3 shows the number of each class of credit rating. It shows that the Korean bond market has a characteristic of being a seller's market where most bond issuances are those with credit ratings of investment grade and institutional investors' demand for buying bonds are greater than the supply of bond issuance. In Panel C, we find that firms with low credit ratings are likely to provide conservative financial reports.

Regression Results

Table 3 shows the regression results. Column (1) of Panel A presents the estimation results for the effect of the conditional conservatism (*CSCORE*) on the rate of yield on the first day of the bond (*MAR*) after controlling for issuer and bond characteristics. Consistent with Hypothesis 1, we find that *CSCORE* is negatively associated with *MAR* at the 1% level (t-statistic of −4.37). The negative coefficient for conditional conservatism supports the information argument that bond issuers with more conservatism reporting exhibit more overpricing practices for newly issued corporate bonds.

Table 3						
THE EFFECT OF ACCOUNTING CONSERVATISM ON INITIAL RETURNS						
Variables	Test of H1			Test of H2		
(pred. sign)	coefficients		t-value	coefficients		t-value
Intercept	0.198	**	2	0.16		0.9
Conservatism (-)	**-1.909**	*******	**-4.37**	**-2.26**	*******	**-2.91**
LowRating x Conservatism (-)				**-6.38**	*******	**-3.7**
Rating (-)	-0.010	***	-3.03			
LowRating(+)				0.08		0.87
OfferingSize (-)	-0.028	***	-5.14	-0.05	***	-5.02
Maturity (-)	-0.005	***	-2.65	-0.01	*	-1.9
Fee (-)	-0.075	*	-1.65	-0.15		-1.3
Competition	0.004		1.41	0.01		1.34
Reputation	0.000		-0.61	0.02		0.31
CFO	-0.060		-1.52	-0.05	***	-5.02
YEAR	Included			Included		
INDUSTRY	Included			Included		
n	919			919		
R-square	38.31%			32.04%		
F-value	13.29***			8.02***		
Dependent variable is MAR which is defined as the daily mean bond excess return.						
*,**, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.						

Table 4									
ROBUSTNESS CHECK									
Variables	Ret2			Ret3			Ret4		
(pred. sign)	coefficients		t-value	coefficients		t-value	coefficients		t-value
Intercept	0.266	**	2.43	0.323		1.64	0.349	*	1.73
Conservatism (-)	-1.859	***	-3.86	-4.596	***	-5.31	-4.381	***	-4.93
OfferingSize (-)	-0.025	***	-4.29	-0.032	***	-3.02	-0.031	***	-2.82
Maturity (-)	-0.005	***	-2.18	-0.005		-1.36	-0.004		-0.96
Rating (-)	-0.012	***	-3.19	-0.017	**	-2.53	-0.018	**	-2.57
Fee (-)	-0.063		-1.27	0.111		1.24	0.108		1.18
Competition	0.003		0.94	0.005		0.93	0.006		1.01
Reputation	-0.001		-0.86	-0.003		-1.62	-0.003		-1.74
CFO	-0.044		-1.01	-0.044		-0.57	-0.060		-0.75
YEAR	Included			Included			Included		
INDUSTRY	Included			Included			Included		
n	919			919			919		
R-square	37.7%			27.33%			27.2 %		
F-Value	12.95***			8.04***			7.99***		

In Column (2), the coefficient of interaction term (*LowRating x Conservatism*) is negative and statistically significant at the 1% level (t-statistic of −3.7). Consistent with

Hypothesis 2, the results indicate that the relation between conditional conservatism (*CSCORE*) and the rate of yield on the first day of the bond (*MAR*) is more pronounce for bonds with low credit ratings. Table 4 show the robustness test with the initial returns of bond offerings over the two, three and four trading days. The results are consistent with using the original measure of initial returns on the first trading date.

CONCLUSIONS

Few studies have investigated how accounting features affect the initial returns of corporate straight debt offerings. This paper shows that accounting reporting quality influences the overpricing practice of newly issued corporate bonds in the Korean bond market. Consistent with Datta et al. (1997), which shows bonds rated BBB below are underpriced while those rated between AAA and BB- are overpriced, we provide empirical evidence that indicate newly issued bonds in emerging Korean market are on average overpriced. Further, we find that overpricing is more pronounced when issuers have more conservative reporting. Consistent with information theories, these results illustrate that firms with less information risk exhibit more overpricing at bond issues. Finally, we document that the association between conservatism and initial returns of bonds is more pronounced for bonds with low credit ratings, suggesting that a higher standard for recognizing gains than losses is more beneficial to firms with low credit risk.

This paper provides implications to both theory and practice. Researchers can further build theory and develop empirical analyses taking advantage of the fruitfulness of diverse institutional contexts and its impact on the efficacy of accounting features in both equity and debt markets. From a more pragmatic point of view, bond analysts can make more informative decisions when predicting the value of a corporate bond upon its initial issuance. More specifically, analysts can derive useful information from accounting practices depending on the level of credit risk of the firm. Finally, this paper provides insight to corporate managers when pricing their initial debt offerings under different institutional environments as well as different firm level conditions as in credit risk.

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