



pecial Issue :

Webinar Nasional
HUMANIS 2023

Website. :

<http://www.openjournal.unpam.ac.id/index.php/SNH>

The Role of Accounting Conservatism as Moderator of The Effect of Financial Ratios on Bond Ratings

Nanang Anduwidagdo¹⁾; Dwi Anto²⁾ and Sugiyanto³⁾

Pamulang University, Indonesia

email : nanang.aw@gmail.com

Abstract

This study is meant to provide useful information for decision makers and investors looking to better understand the risks associated with bond investing. It aims to examine the effect of various key financial ratios with bond rating and the role of accounting conservatism as moderator of these effects. Data sourced from Indonesia Stock Exchange and Indonesia Bond Pricing Agency, contains 16 issuances from 16 banking firms within period of 2018-2021, and analyzed using Partial Least Square Structural Equation Model (PLS-SEM). The findings are leverage ratios partially influenced bond ratings, while coverage, liquidity, profitability, and cash flow-to-debt ratio show no relationship with bond ratings. Accounting conservatism are able to moderate coverage, leverage, liquidity, and profitability ratios on bond ratings, but failed to moderate cash flow-to-debt ratio. This study demonstrates that disparities in bank risk-taking behavior are impacted by variances in accounting-based risk measures and extends prior research that examines the implication of bank risk taking behavior to investment risk.

Keywords: Bond Rating; Accounting Conservatism; Financial Ratios

INTRODUCTION

Several Indonesian banks have been accused of financial report manipulation, including Bank Tabungan Negara in 2020 (Safitri, 2020), Bank Bukopin in 2018 (Rachman, 2018), and Bank Lippo in 2003 (Syahrul, 2003). This financial report manipulation is purportedly done to boost the company's value in the eyes of investors. Indonesia's banking industry, similar to that of other countries, faces greater risk-taking incentives and opportunities than most other industries. Banks encounter tremendous incentives to loan aggressively and incur significant risks, frequently ignoring basic risk management (Kanagaretnam et al., 2013). By engaging in aggressive lending and other high-risk operations, they have less to lose and more to gain the less their capital base is. Because of their complexity, significant information asymmetries, opaqueness, and contracting peculiarities, banks need to practice accounting conservatism in particular (Leventis et al., 2013). According to Watts (2003), the key objective of accounting conservatism is to build a barrier against management's inclination to falsify financial results for its own advantage. He also argued that accounting conservatism exists for four reasons, one of which is debt contracting, defined as the level of information required by creditors for increases in net assets being higher than that required for decreases in net assets in order to avoid the risk of losing some of their investments.

Accounting conservatism has an influence on the quality of information in debt contracting arrangements. As with equity market users, the relevance of accounting information to lending decisions and the presence of information asymmetry are the two most important elements of information quality for bond market investors. Accounting information is considered high-quality if it is beneficial to lending decisions and reduces information asymmetry between lenders and borrowers. (Ruch & Taylor, 2015). Using conservative accounting improves the ability to identify potential defaults and lowers interest rates. Conservatism also helps lenders by giving them an earlier warning of the probability of default and helps investors through lower interest rates. (Zhang, 2008). Financial ratios are affected by increased conservatism. Thus, including information on a company's level of reporting conservatism increases values and the yield on investing strategies based on these ratios (Givoly & Hayn, 2002). If companies use less conservative accounting, the increasing bondholder/shareholder conflict causes bondholders to expect a greater rate of return to compensate for the increased risk. Information asymmetry between corporate insiders and external equity investors pushes managers to adopt conservative accounting practices because conservative financial reports are likely to result in a more informed capital market than conservative financial reports that include unverifiable information (Hu et al., 2014).

Based on the aforementioned, this study tries to prove that banking financial performance affects bond rating. It is possible to conclude that accounting conservatism influences investment risks, and so examining the relationship between accounting conservatism and bond rating will be beneficial to investors. This study is meant to provide information for decision makers and investors looking to better understand the risks associated with bond investing.

This study contributes to the literature in a number of ways. First, it complements previous studies on bond rating determinants. Financial performance is another significant factor of bond rating, according to the evidence provided. This conclusion is especially significant for research that look at disparities in financial reporting and its link with investment risk. Second, this research demonstrates that disparities in bank risk-taking behavior are impacted by variances in accounting-based risk measures. It illustrates that, even in a highly opaque business like banking, accounting-based risk measurements accurately reflect the anticipated relationships between financial performance and risk taking. Third, this study extends prior research that examines the implication of bank risk taking behavior to investment risk. Whereas prior studies focus on partial relationship of determinants such as financial ratios (Borhan & Ahmad, 2018), bond indentures (Fadah et al., 2020), and macroeconomics (Megananda et al., 2021), this study show that, in addition to these determinants, bond rating also affected by risk taking.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Accounting conservatism refers to how management of a company reacts immediately to "bad news" while neglecting to acknowledge "positive news" (Basu, 1997). Accounting conservatism is defined as accounting policies or tendencies that result in a lower bias of accounting net asset value relative to economic net asset value (Ruch & Taylor, 2015). It is one of the most essential aspects of accounting information. Conservatism may also refer to taking the extreme position of not only recognizing losses even when they have not yet materialized, but also not recognizing earnings, unless a valid claim to such earnings exists (Sugiyanto & Candra, 2018). El-Bannany (2017) states several considerations to measure accounting conservatism, including an asymmetric timeliness of earnings, a negative accruals measure, a market-to-book ratio measure and hidden reserve measure. This study utilizes the best fit approach to measure accounting conservatism using the market-to-book ratio, according to Roychowdhury & Watts (2007) and Ball et al. (2013) as shown below. The market-to-book ratio is simply the ratio of the market value of a share of a company's stock divided by the book value per share of equity reported on the company's balance sheet. To calculate the book value per share, divide the firm's common equity book value by the number of outstanding shares of stock (Titman et al., 2018).

$$\text{Market - to - Book Ratio} = \frac{\text{Market Price per Share}}{\left(\frac{\text{Shareholder's Equity}}{\text{Common Shares Outstanding}}\right)}$$

According to Mattarocci (2014), bond rating is a synthetic assessment that summarizes the main qualitative and quantitative characteristics of an issue or bond issuer using an alphanumeric scale. Bond ratings are formal opinions issued by rating agencies, regarding risk and creditworthiness for investors of certain debt securities (Choudhry, 2001: 496). Bonds are rated to reflect the probability of default. The highest rating is AAA and goes all the way down to D. The risk level of bond ratings in Indonesia is equated with Standard and Poor's (S&P) ratings and is interpreted and summarized in table 1 below.

Table 1. Summary of Bond Rating System and Symbols

S&P Symbols	Brief Interpretation	Grade
AAA	Gilt edge, prime, maximum safety	
AA+		
AA	Very high grade, high quality	
AA-		
A+		Investment grade: high credit worthiness
A	Upper medium grade	
A-		
BBB+		
BBB	Lower medium grade	
BBB-		
BB+		Distinctly speculative: low credit worthiness
BB	Low grade, speculative	
BB-		
B+		
B	Highly speculative	
B-		
CCC	Substantial risk, in poor standing	Predominantly Speculative: substantial risk or in default
SD	Even more speculative than those above, extreme risk	
D	Default	

Source: PT Pemeringkat Efek Indonesia (2020) and Fabozzi (2013)

A bond's rating is determined by an analysis of the bond issuer's financial statements. These analyses are carried out on the key financial risk ratios, consisted of coverage ratio, leverage ratio, liquidity ratio, profitability ratio, cash flow-to-debt ratio (Bodie et al., 2013).

Coverage ratios measure company's ability to pay certain fixed charges (Gitman & Zutter, 2015). In general, the lower the coverage ratios of a company, the less secure it is of meeting its liabilities. This study uses interest coverage ratio as proxy to coverage ratio. Interest coverage ratio, also known as times-interest-earned ratio measures a company's ability to pay contractual interest payments. The higher its worth, the better the firm's ability to pay its interest payments. Ismail & Arundina (2019) and Maharani (2019) prove the relationship between the coverage ratio and bond ratings, stating that the coverage ratio has a significant influence on bond ratings. The interest coverage is calculated as.

$$\text{Interest Coverage Ratio} = \frac{EBIT}{\text{Interest}}$$

Leverage ratio is used to measure a company's capacity to finance itself through debt to its ability to fund itself through equity. This study uses the Debt-to-Equity ratio as a proxy for the leverage ratio, based on D'Mello and Farhat's (2008) conclusion that corporations may raise the value of the Debt-to-Equity ratio to maximize leverage. According to Christine and Elizabeth (2018) and Putra and Djazuli (2018) studies, leverage ratio has a strong influence on bond ratings. Debt-to-Equity ratio shows the extent to which debt financing is used relative to equity financing and is calculated as.

$$\text{Debt - to - Equity Ratio} = \frac{\text{Total Liabilities}}{\text{Common Stock Equity}}$$

Liquidity ratio shows the relationship of the company's cash and other current assets with its current liabilities (Brigham & Houston, 2009). Liquidity indicates the company's capacity to turn assets into cash immediately, particularly to support daily operations. Loan-to-deposit ratio used as proxy to liquidity ratio. According to Kasmir (2019), the loan-to-deposit ratio is a ratio used to evaluate the quantity of credit issued in comparison to the amount of public money and own capital utilised. The greater the loan-to-deposit ratio, the better the bank liquidity and performance, which can have a direct beneficial impact on investment risk. This relationship is similar with the findings of Darmawan et al., (2020) and Ramadhani & Juwita (2022), who found a substantial relation between the liquidity ratio and bond ratings. Loan-to-deposit ratio is calculated as.

$$\text{Loan – to – Deposit Ratio} = \frac{\text{Total Loan}}{\text{Total Deposits}}$$

Profitability ratios are defined as ratios that indicate the combined effect of liquidity, asset management, and debt on operating outcomes (Brigham and Houston, 2019). The profitability ratio shows the net results of all operational operations as well as the funding policy of the organization. According to Yousaf and Dey (2022), the Return-on-Equity ratio is a proxy for the liquidity ratio. According to Dewi and Utami (2020) and Phety (2018), profitability ratio has a significant effect on bond ratings. Return-on-Equity ratio is a solid proxy for analyzing a company's financial performance and is calculated as.

$$\text{Return – on – Equity Ratio} = \frac{\text{Net Income}}{\text{Common Stock Equity}}$$

The cash flow-to-debt ratio calculates a company's operating cash flow to its total debt (Bodie et al., 2013). This ratio can be utilized to calculate how long it would take a corporation to repay its debt if it allocated all of its cash flow to debt repayment. Cash flow is considered instead of earnings because it offers a more accurate assessment of a company's capacity to meet its commitments. There has not been much research that look at the relationship between cash flow-to-debt ratio and bond ratings. This research is expected to close or narrow the existing research gap due to absence of findings. Cash flow-to-debt ratio is calculated as.

$$\text{Cash flow – to – Debt Ratio} = \frac{\text{Cash Flow from Operations}}{\text{Total Debt}}$$

Ten Hypothesis are presented in accordance with the literature review and the conclusions of prior studies, as illustrated in the conceptual framework in Figure 1, and are presented below.

- H₁: Coverage ratio is significantly related to bond rating
- H₂: Leverage ratio is significantly related to bond rating
- H₃: Liquidity ratio is significantly related to bond rating
- H₄: Profitability ratio is significantly related to bond rating
- H₅: Cash flow-to-debt ratio is significantly related to bond rating
- H₆: Accounting conservatism moderated the relationship of coverage ratio on bond rating
- H₇: Accounting conservatism moderated the relationship of leverage ratio on bond rating
- H₈: Accounting conservatism moderated the relationship of liquidity ratio on bond rating
- H₉: Accounting conservatism moderated the relationship of profitability ratio on bond rating
- H₁₀: Accounting conservatism moderated the relationship of cash flow-to-debt ratio on bond rating

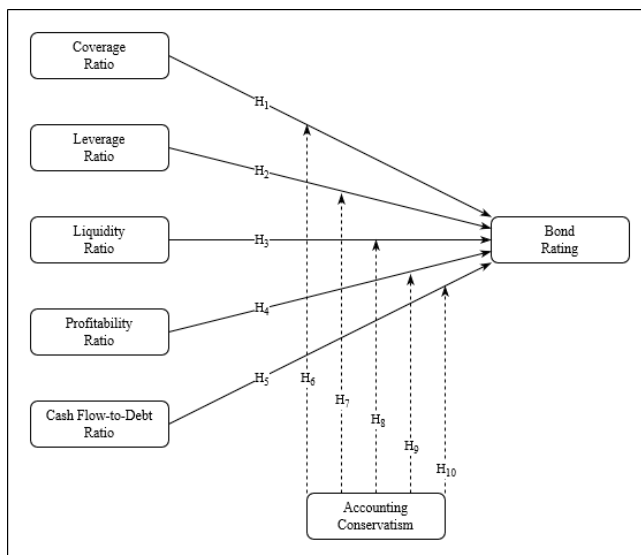


Figure 1. Conceptual Framework

Source : Research, 2022

METHODS

This study is a quantitative causal explanatory study that explains the relationship between the independent variable and the dependent variable through hypothesis testing. Data sourced from Indonesia Stock Exchange and Indonesia Bond Pricing Agency, contains 16 issuances from 16 Banking firms within the four years period of analysis, as summarized as follows.

Table 2. List of Samples

Issuer	Code
PT Bank Capital Indonesia Tbk.	BACA02SB
PT Bank Central Asia Tbk.	BBCA01ASBCN1
PT Bank Bukopin Tbk.	BBKP02SBCN1
PT Bank Negara Indonesia (Persero) Tbk.	BBNI01CN1
PT Bank Rakyat Indonesia (Persero) Tbk.	BBRI02CCN2
PT Bank Tabungan Negara (Persero) Tbk.	BBTN02CCN1
PT MNC Kapital Indonesia Tbk.	BCAP02CN1
PT Bank Danamon Indonesia Tbk.	BDMN01BCN1
PT BPD Jawa Barat dan Banten Tbk.	BJBR01CCN1
PT Bank Mandiri (Persero) Tbk.	BMRI01ACN2
PT Bank CIMB Niaga Tbk.	BNGA02CCN1
PT Bank Maybank Indonesia Tbk.	BNII02SBCN2
PT Bank Permata Tbk.	BNLI02SBCN2
PT Bank Victoria International Tbk.	BVIC01SBCN1
PT Bank Mayapada Internasional Tbk.	MAYA01SBCN1
PT Bank Pan Indonesia Tbk.	PNBN02SBCN1

Source : Research, 2022

Data were analyzed using a component-based Structural Equation Modelling (SEM) method or known as Partial Least Square (PLS) with SmartPLS 4. PLS-SEM was selected because this study consists of financial ratios, analysis is focused with the prediction testing of a theoretical framework, and its sample size are restricted by small population (Hair et al., 2019).

PLS-SEM is evaluated with two stages model: the measurement model (outer model) and the structural model (inner model). The outer model is evaluated with convergent validity by determining the loading factor (outer loading value $\geq 0,7$) and collinearity of the formative indicators ($VIF \leq 5$). Discriminant validity and reliability testing are not performed because this model only contains formative or single-item constructs. The inner model is evaluated with the examination of R-square to measure the model's explanatory power, and path coefficient significance (T-statistics $> 1,96$ and p-value $\leq 0,05$) (Hair et al., 2019). To analyze and demonstrate the nature of moderation, a simple slope analysis following are conducted. Slope plots are typically used as a visual illustration to gain a better understanding of the moderation effect (Hair et al., 2021). The horizontal x-axis represents the exogenous construct, and the

vertical y-axis represents the endogenous construct. The two lines illustrate the relationship between exogenous construct and endogenous construct for both low and high levels of the moderator construct (Matthews et al., 2018).

RESULT AND DISCUSSION

The outer loading values of this model are all above the rule of thumb value, indicating that the rule of thumb was met and that all indicators are reliable, as shown in Figure 2. The absence of a strong inter-correlation between the exogenous variables in this study is indicated by the VIF Inner Model values.

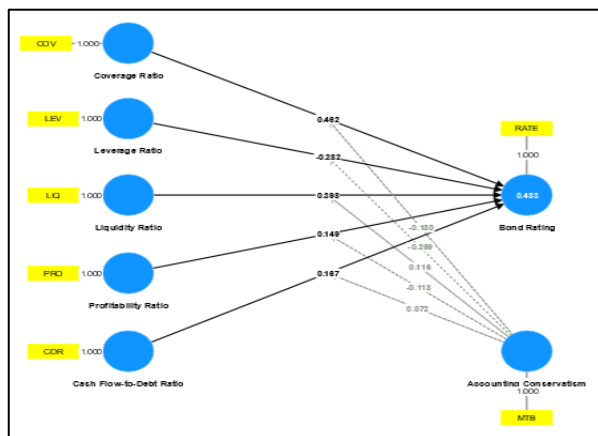


Figure 2. Outer Model Test Results

Source : Research, 2022

The absence of a strong inter-correlation between the exogenous variables in this study is indicated by the VIF Inner Model values in Table 3.

Table 3. Collinearity Statistics

	VIF
Coverage Ratio	3.122
Leverage Ratio	1.914
Liquidity Ratio	1.633
Profitability Ratio	2.236
Cash Flow-to-Debt Ratio	2.446

Source : Research, 2022

The inner model is evaluated by examining the coefficient values of the path parameters of the latent variable relation. The structural relationship model was tested to evaluate the relationship between the latent variables in this study. The structural model and hypothesis testing are performed using the SmartPLS output by looking at the estimated value of the path coefficient and the critical point value (T-statistic) that is significant at a p-value of 0,05. The structural model of this study is presented in Figure 3. below.

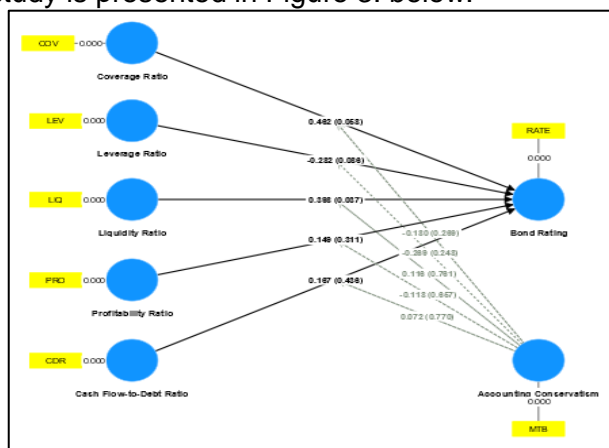


Figure 3. Inner Model Test Results

Source : Research, 2022

Based on the R-square value shown in table 4, this research model's accuracy in explaining the variety of coverage, leverage, liquidity, profitability, and cash flow-to-debt ratios on bond rating is 48,3%. Other variables not included in this model explain the remaining 51,7%.

Table 4. R-square Value

	R-square	R-square adjusted
Bond Rating	0.483	0.373

Source : Research, 2022

The results of the direct path effect coefficient between coverage ratio, leverage ratio, liquidity ratio, profitability ratio, and cash flow-to-debt ratio on bond rating can be seen in as follows.

Table 5. Path Coefficients

Hypothesis	Relationship	Original sample	Sample mean	Standard deviation	T statistics	p values
H1	Coverage Ratio -> Bond Rating	0.462	0.474	0.243	1.899	0.058
H2	Leverage Ratio -> Bond Rating	-0.282	-0.299	0.164	1.716	0.086
H3	Liquidity Ratio -> Bond Rating	0.398	0.365	0.191	2.082	0.037
H4	Profitability Ratio -> Bond Rating	0.149	0.147	0.147	1.013	0.311
H5	Cash Flow-to-Debt Ratio -> Bond Rating	0.167	0.210	0.215	0.778	0.436

Source : Research, 2022

Based on Table 5., partial relationship hypotheses and its result are briefly discussed as follows: (1) coverage ratio has T-statistics value of 1,899 (<1,96) and p-value of 0,058 (>0,05), indicating that coverage ratio has no influence on bond rating and thus H₁ is rejected; (2) leverage ratio has T-statistics value of 1,716 (<1,96) and p-value of 0,086 (>0,05), indicating that leverage ratio has no influence on bond rating and thus H₂ is rejected; (3) liquidity ratio has T-statistics value of 2,082 (>1,96) and p-value of 0,037 (<0,05), indicating that liquidity ratio has significant influence on bond rating and thus H₃ is accepted; (4) profitability ratio has T-statistics value of 1,013 (<1,96) and p-value of 0,311 (>0,05), indicating that profitability ratio has no influence on bond rating and thus H₄ is rejected; and (5) cash flow-to-debt ratio has T-statistics value of 0,778 (<1,96) and p-value of 0,436 (>0,05), indicating that cash flow-to-debt ratio has no influence on bond rating and thus H₅ is rejected.

Moderating relationship hypotheses and its result are shown and discussed in these figures below.

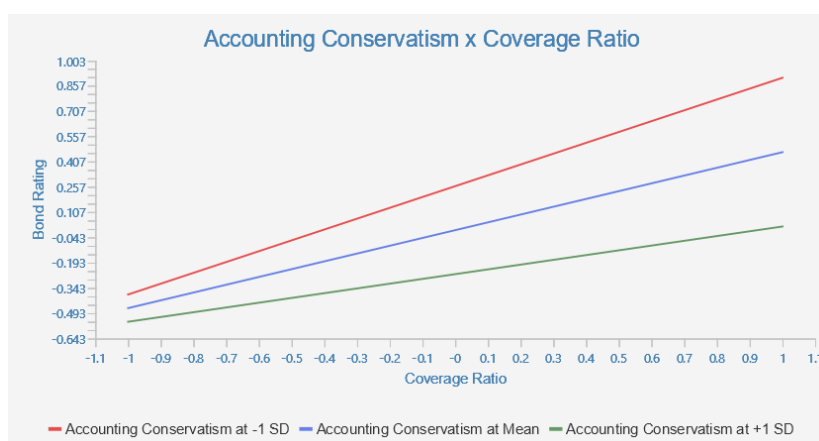


Figure 4. Moderating Effect of Accounting Conservatism on Coverage Ratio to Bond Rating

Source : Research, 2022

Figure 4. shows a noticeable gradient between lines with a high degree of influence and lines with a low degree of influence. High value accounting conservatism has a greater effect than a low value. As a result, accounting conservatism is considered to moderate the effect of the coverage ratio on bond ratings and thus H₆ is accepted.

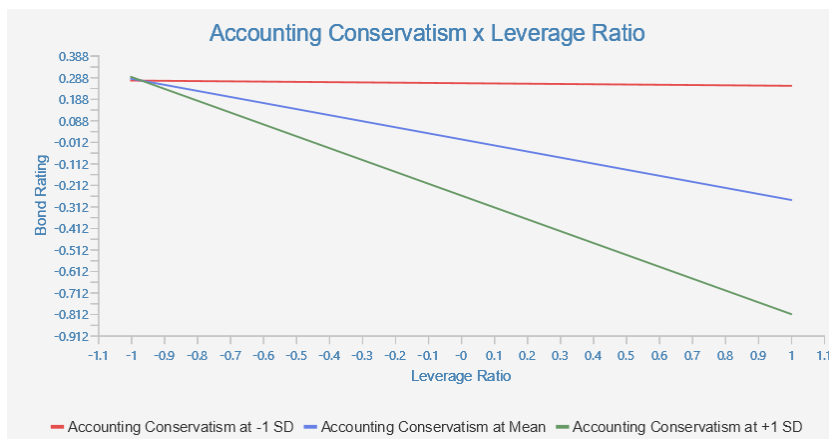


Figure 5. Moderating Effect of Accounting Conservatism on Leverage Ratio to Bond Rating

Source : Research, 2022

Figure 5. shows a significant gradient between lines with a high degree of influence and lines with a low degree of influence. High value accounting conservatism has a greater effect than a low value. As a result, accounting conservatism is considered to moderate the effect of the leverage ratio on bond ratings and thus H_7 is accepted.

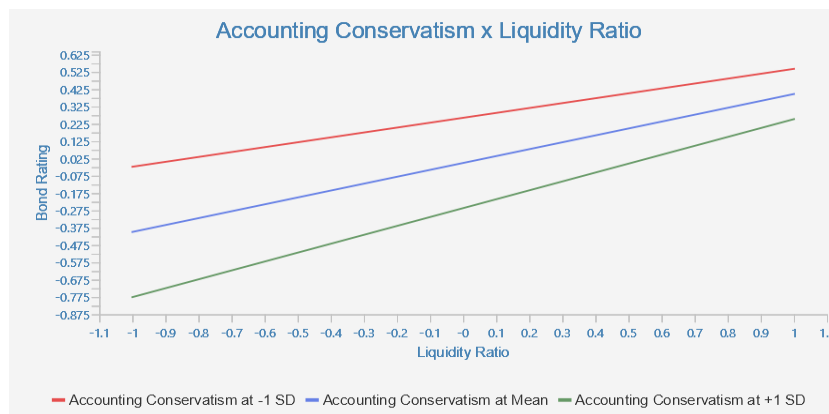


Figure 6. Moderating Effect of Accounting Conservatism on Liquidity Ratio to Bond Rating

Source : Research, 2022

Figure 6. shows a noticeable gradient between lines with a high degree of influence and lines with a low degree of influence. High value accounting conservatism has a greater effect than a low value. As a result, accounting conservatism is considered to moderate the effect of the liquidity ratio on bond ratings and thus H_8 is accepted.

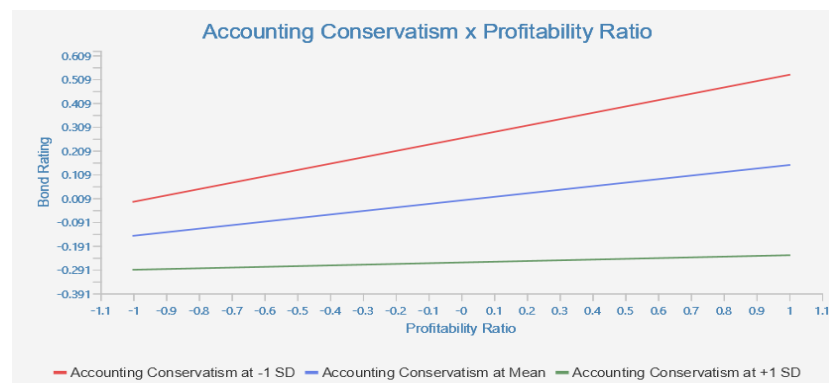


Figure 7. Moderating Effect of Accounting Conservatism on Profitability Ratio to Bond Rating

Source : Research, 2022

Figure 7. shows a noticeable gradient between lines with a high degree of influence and lines with a low degree of influence. High value accounting conservatism has a greater effect than a low value. As a result, accounting conservatism is considered to moderate the effect of the profitability ratio on bond ratings and thus H_9 is accepted.

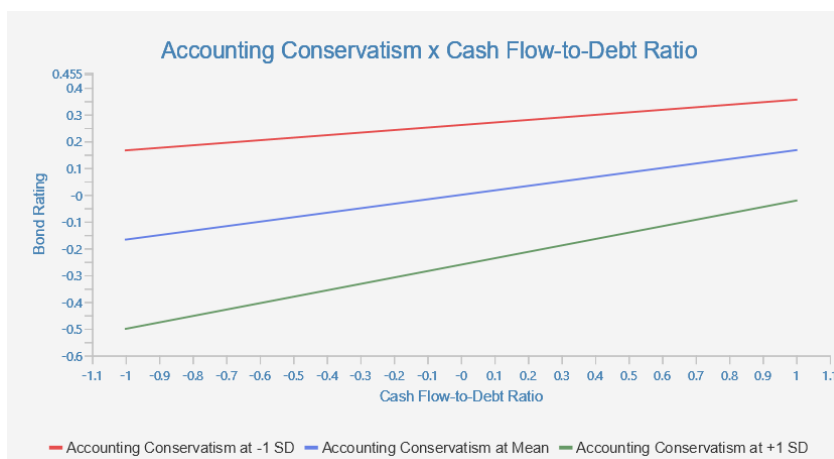


Figure 8. Moderating Effect of Accounting Conservatism on Cash Flow-to-Debt Ratio to Bond Rating

Source : Research, 2022

Figure 8. shows an exceedingly small to non-existent gradient between lines with a high degree of influence and lines with a low degree of influence. Both high and low value accounting conservatism has same effect. As a result, accounting conservatism is not considered to moderate the effect of the profitability ratio on bond ratings and thus H_{10} is rejected.

CONCLUSION

The first objective of this study is to examine the impact of various key financial ratios with rating changes. Of the five ratios evaluated, only leverage ratio is proven to have significant effect on bond ratings, while coverage, liquidity, profitability, and cash flow-to-debt ratio show no relationship with bond ratings. This finding is not surprising as it is well known for banking corporations to have diversified investment portfolios (Higgins, 2016). These findings are similar to Hidayat (2018) and Linawati and Wibowo (2020) and can be concluded that bond rating prediction are not solely covered by key financial ratios.

The second objective is to uncover the role of accounting conservatism in influencing investment risks and bond ratings. Evidence shows that accounting conservatism practices are able to increase or decrease risks faced by investors, in relation with coverage, leverage liquidity, and profitability ratios. It also suggests that accounting conservatism failed to moderate cash flow-to-debt ratio on bond ratings. These findings prove that bank's systematic risk measures are relevant in predicting bond ratings.

Overall, this study found that bond ratings of banks listed in Indonesia Stock Exchange can be explained by the measure of its financial performance. It also found that to reduce investment risks, thus increasing bond ratings, accounting conservatism can be applied. In practical standpoint, investors can rely on bank managements conservatism to mitigate risks and protect their investment. Furthermore, investors should be focused on bank's leverage, especially its portfolio diversification. In academic standpoint, this study added different point of view in bond studies, especially in Asian region. It added another use of financial performances measurement to assess investment risks. Further studies may utilize different proxies or add other variables related to financial ratios.

REFERENCES

Ball, R., Kothari, S. P., & Nikolaev, V. V. (2013). Econometrics of the Basu Asymmetric Timeliness Coefficient and Accounting Conservatism. *Journal of Accounting Research*, 51(5), 1071–1097. <https://doi.org/10.1111/1475-679x.12026>

- Basu, S. (1997). The conservatism principle and the asymmetric timeliness of earnings. *Journal of Accounting and Economics*, 24(1), 3–37. [https://doi.org/10.1016/s0165-4101\(97\)00014-1](https://doi.org/10.1016/s0165-4101(97)00014-1)
- Bodie, Z., Kane, A., & Marcus, A. J. (2013). *Essentials of investments*. New York: McGraw-Hill/Irwin.
- Borhan, N. A., & Ahmad, N. (2018). Identifying the determinants of Malaysian corporate Sukuk rating. *International Journal of Islamic and Middle Eastern Finance and Management*, 11(3), 432–448. <https://doi.org/10.1108/imefm-02-2017-0045>
- Brigham, E. F., & Houston, J. F. (2009). *Fundamentals of financial management* (12th ed.). Mason: South-Western Cengage Learning.
- Choudhary, M. K., & Rathore, N. S. (2013). Role of effective communication in Total Quality Management. *International Journal of Scientific & Engineering Research*, 4(7), 2083–2090. <https://www.ijser.org/researchpaper/Role-of-Effective-Communication-in-Total-Quality-Management.pdf>
- Choudhry, M. (2003). *Bond and Money Markets*. Woburn: Butterworth-Heinemann.
- Christine, S., & Elizabeth, S. M. (2018). Analisis pengaruh current ratio, return on asset, debt to equity ratio dan total asset turn over terhadap peringkat obligasi perusahaan food and beverage di Bursa Efek Indonesia periode 2010-2017. 1–11. CORE. <https://core.ac.uk/download/pdf/187738956.pdf>
- D’Mello, R., & Farhat, J. (2008). A comparative analysis of proxies for an optimal leverage ratio. *Review of Financial Economics*, 17(3), 213–227. <https://doi.org/10.1016/j.rfe.2007.06.001>
- Darmawan, A., Al Fayed, Y. F., Bagis, F., & Pratama, B. C. (2020). Pengaruh profitabilitas, likuiditas, leverage, umur obligasi dan ukuran perusahaan terhadap peringkat obligasi pada sektor keuangan yang terdapat di BEI tahun 2015-2018. *DERIVATIF: Jurnal Manajemen*, 14(1), 99–114. <https://doi.org/10.24127/jm.v14i1.443>
- Dewi, M. S., & Utami, E. M. (2020). The influence of profitability and liquidity to bond rating and the impact on the bond yield. *International Journal of Research in Business and Social Science*, 9(4), 214–219. <https://doi.org/10.20525/ijrbs.v9i4.729>
- El-Bannany, M. (2017). Factors influencing accounting conservatism in banks: the UAE case. *Journal of Governance and Regulation*, 6(2), 14–21. https://doi.org/10.22495/jgr_v6_i2_p2
- Fadah, I., Ayuningtyas, A., Puspitasari, N., & Yuswanto, I. B. (2020). Analysis of financial and non-financial factors affecting bond ratings. *IOP Conference Series: Earth and Environmental Science*, 485, 1–9. <https://doi.org/10.1088/1755-1315/485/1/012019>
- Gitman, L. J., & Zutter, C. J. (2015). *Principles of managerial finance*. Harlow: Pearson Education Limited.
- Givoly, D., & Hayn, C. (2002). Rising Conservatism: Implications for Financial Analysis. *Financial Analysts Journal*, 58(1), 56–74. <https://doi.org/10.2469/faj.v58.n1.2510>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R. *In Classroom Companion: Business*. Springer International Publishing. <https://doi.org/10.1007/978-3-030-80519-7>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/eb-11-2018-0203>
- Hidayat, W. W. (2018). Pengaruh leverage dan likuiditas terhadap peringkat obligasi. *Jurnal Riset Manajemen Dan Bisnis (JRMB)*, 3(3), 387–394. <https://doi.org/10.36226/jrmb.v3i3.155>
- Higgins, R. C., Koski, J. L., & Mitton, T. (2016). *Analysis for financial management* (11th ed.). New York: McGraw-Hill Irwin.
- Hu, J., Li, A. Y., & Zhang, F. (Frank). (2014). Does accounting conservatism improve the corporate information environment? *Journal of International Accounting, Auditing and Taxation*, 23(1), 32–43. <https://doi.org/10.1016/j.intaccaudtax.2014.02.003>
- IDX Annually Statistic. (2022). Bursa Efek Indonesia. <https://idx.co.id/id/data-pasar/laporan-statistik/statistik/>
- Indonesia Bond Market Directory. (2022). PT Penilai Harga Efek Indonesia. <https://www.phei.co.id/en-us/Publication/IBMD>
- Ismail, N., & Arundina, T. (2019). Sukuk rating prediction: The case of corporate sukuk in Indonesia. *Pertanika Journal of Social Sciences and Humanities*, 27(2), 63–77.

- <https://scholar.ui.ac.id/en/publications/sukuk-rating-prediction-the-case-of-corporate-sukuk-in-indonesia>
- Kanagaretnam, K., Lim, C. Y., & Lobo, G. J. (2013). Influence of National Culture on Accounting Conservatism and Risk-Taking in the Banking Industry. *The Accounting Review*, 89(3), 1115–1149. <https://doi.org/10.2308/accr-50682>
- Leventis, S., Dimitropoulos, P., & Owusu-Ansah, S. (2013). Corporate Governance and Accounting Conservatism: Evidence from the Banking Industry. *Corporate Governance: An International Review*, 21(3), 264–286. <https://doi.org/10.1111/corg.12015>
- Linawati, L., & Wibowo, A. E. (2020). Pengaruh likuiditas, profitabilitas dan leverage terhadap peringkat obligasi perusahaan di indonesia. *Jurnal Riset Manajemen*, 7(2), 143–152. <https://doi.org/10.32477/jrm.v7i2.201>
- Maharani, F. R. (2019). Pengaruh rasio leverage, interest coverage ratio dan jaminan terhadap peringkat obligasi perusahaan bumh konstruksi yang terdaftar di Bursa Efek Indonesia tahun 2012-2016. *Jurnal Pendidikan Dan Ekonomi*, 8(4), 307–316. <https://journal.student.uny.ac.id/index.php/ekonomi/article/view/15332>
- Mattarocci, G. (2013). *The Independence of Credit Rating Agencies*. Oxford: Academic Press.
- Matthews, L., Hair, J., & Matthews, R. (2018). PLS-SEM: The Holy Grail for Advanced Analysis. *The Marketing Management Journal*, 28(1), 1–13. <http://www.mmaglobal.org/publications/MMJ/MMJ-Issues/2018-Spring/MMJ-2018-Vol28-Issue1-Matthews-Hair-Matthews-pp1-13.pdf>
- Megananda, D., Endri, E., Oemar, F., & Husna, A. (2021). Determinants of Corporate Bond Yield: Empirical Evidence from Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(3), 1135–1142. <https://doi.org/10.13106/jafeb.2021.vol8.no3.1135>
- Phety, D. T. O. (2018). Pengaruh DER, CAR, dan ROE terhadap Peringkat Obligasi Perbankan yang Listing di PT Bursa Efek Indonesia pada Periode 2008-2013. *Organum: Jurnal Saintifik Manajemen Dan Akuntansi*, 1(2), 47–58. <https://doi.org/10.35138/organum.v1i2.32>
- Putra, Y. A., & Djazuli, A. (2018). Pengaruh rasio profitabilitas, likuiditas, solvabilitas, ukuran perusahaan dan jaminan terhadap peringkat obligasi (Studi pada perusahaan yang mengeluarkan obligasi dan terdaftar di Bursa Efek Indonesia). *Jurnal Ilmiah Mahasiswa FEB*, 6(2), 1–16. <https://jimfeb.ub.ac.id/index.php/jimfeb/article/view/4784>
- Rachman, F. F. (2018, April 27). *Bank Bukopin Permak Laporan Keuangan, Ini Kata BI dan OJK*. Detikfinance. <https://finance.detik.com/moneter/d-3994551/bank-bukopin-permak-laporan-keuangan-ini-kata-bi-dan-ojk>
- Ramadhani, S., & Juwita, R. (2022). Pengaruh Return On Equity (ROE), Current Ratio (CR), Debt To Equity Ratio (DER), Inventory Turnover (IT), Dan Price Earning Ratio (PER) Terhadap Peringkat Obligasi Korporasi Yang Terdaftar Di Bursa Efek Indonesia (BEI) Periode 2016-2020. *Forum Bisnis Dan Kewirausahaan*, 11(2), 403–410. <https://doi.org/10.35957/forbiswira.v11i2.2251>
- Roychowdhury, S., & Watts, R. L. (2007). Asymmetric timeliness of earnings, market-to-book and conservatism in financial reporting. *Journal of Accounting and Economics*, 44(1), 2–31. <https://doi.org/10.1016/j.jacceco.2006.12.003>
- Ruch, G. W., & Taylor, G. (2015). Accounting conservatism: A review of the literature. *Journal of Accounting Literature*, 34, 17–38. <https://doi.org/10.1016/j.acclit.2015.02.001>
- Safitri, K. (2020, February 3). *DPR Panggil Dirut BTN Terkait Dugaan Manipulasi Laporan Keuangan* (Y. Sukmana, Ed.). KOMPAS.com. <https://money.kompas.com/read/2020/02/03/151601726/dpr-panggil-dirut-btn-terkait-dugaan-manipulasi-laporan-keuangan>
- Sugiyanto, S., & Candra, A. (2018). Good Corporate Governance, Conservatism Accounting, Real Earnings Management, and Information Asymmetry on Share Return. *Jurnal Ilmiah Akuntansi Fakultas Ekonomi*, 4(1), 9–18. <https://doi.org/10.34204/jiafe.v4i1.1073>
- Syahrul, Y. (2003, August 1). *BEJ Anggap Kasus Laporan Keuangan Bank Lippo Selesai*. Tempo. <https://bisnis.tempo.co/read/6701/bej-anggap-kasus-laporan-keuangan-bank-lippo-selesai>
- Titman, S., Keown, A. J., & Martin, J. D. (2018). *Financial management: principles and applications* (13th ed.). New York: Pearson.



- Watts, R. L. (2003). Conservatism in Accounting - Part I: Explanations and Implications. *SSRN Electronic Journal*, 3–35. <https://doi.org/10.2139/ssrn.414522>
- Yousaf, M., & Dey, S. K. (2022). Best proxy to determine firm performance using financial ratios: A CHAID approach. *Review of Economic Perspectives*, 22(3), 219–239. <https://doi.org/10.2478/revecp-2022-0010>
- Zhang, J. (2008). The contracting benefits of accounting conservatism to lenders and borrowers. *Journal of Accounting and Economics*, 45(1), 27–54. <https://doi.org/10.1016/j.jacceco.2007.06.002>