

Determinants of Corporate Sukuk Credit Spreads in Indonesia's Primary Market

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ABSTRACT

This study aims to examine the effects of leverage (Debt-to-Equity Ratio/DER), profitability (Return on Assets/ROA), rating, and the book-to-market ratio on the credit spread of corporate sukuk in the Indonesian primary market. The sample consists of 39 corporate sukuk and 10 sovereign sukuk issued through initial public offerings (IPOs) in the primary market and listed on the Indonesia Stock Exchange (IDX) during the 2018–2022 period, selected using purposive sampling. Data were obtained from the Indonesia Bond Market Directory and companies' financial statements published by the Indonesia Stock Exchange. Data were analyzed using multiple linear regression with EViews 12 software. The results indicate that, individually, leverage and profitability do not have a significant effect on corporate sukuk credit spreads. In contrast, sukuk ratings have a significant negative effect, while the book-to-market ratio has a significant positive effect on credit spreads. These findings suggest that sukuk ratings and the book-to-market ratio are important determinants of corporate sukuk credit spreads, whereas leverage and profitability have not been shown to exert a significant influence.

ABSTRAK

Penelitian ini bertujuan untuk menguji pengaruh *Leverage* (*Debt to Equity Ratio*/DER), *Profitabilitas* (*Return on Asset*/ROA), *Rating*, serta *Rasio Book-to-Market* terhadap *Credit Spread* Sukuk Korporasi di pasar primer Indonesia. Sampel terdiri dari 39 sukuk korporasi dan 10 sukuk negara yang diterbitkan saat IPO (*Primary Market Spread*) dan terdaftar di Bursa Efek Indonesia (BEI) pada periode penelitian 2018-2022 dengan metode *purposive sampling*. Data diperoleh melalui *Indonesia Bond Market Directory* dan laporan keuangan perusahaan yang diterbitkan oleh Bursa Efek Indonesia. Analisis data dilakukan menggunakan analisis regresi linear berganda dengan bantuan *software* E-Views 12. Hasil penelitian menunjukkan bahwa secara parsial, *leverage* dan *profitabilitas* tidak signifikan mempengaruhi *credit spread* sukuk, sementara *rating* berpengaruh negatif signifikan dan *rasio book-to-market* berpengaruh positif signifikan terhadap *credit spread* sukuk. Penelitian ini menyimpulkan bahwa *rating* sukuk dan *rasio book-to-market* merupakan faktor yang dipertimbangkan dalam menentukan *credit spread* sukuk, sedangkan *leverage* dan *profitabilitas* belum terbukti memberikan pengaruh yang signifikan.

1. Introduction

Indonesia, the country with the largest Muslim population in the world, has seen significant growth in its Sharia-based securities market. The Sharia capital market refers to activities related to the trading of securities issued by public companies, in which all operations and mechanisms adhere to Sharia principles that prohibit *riba*, *masyir*, and *gharar* [1]. The Islamic capital market was first launched in 1997. Since then, Indonesia's Islamic capital market has continued to grow and develop, as evidenced by the increasing number of Islamic financial products. To develop and harness the immense potential of the Islamic capital market, the government has authorized and issued Islamic bond instruments known as sukuk.

Sukuk are Sharia-compliant securities in the form of certificates or proof of ownership of equal value, reflecting indivisible ownership of underlying assets, such as tangible assets, benefits, or specific projects, and are issued in accordance with Sharia principles [2]. In Indonesia, sukuk are divided into two types: government sukuk, which are issued by the Indonesian government through the Ministry of Finance of the Republic of Indonesia as a source of funding for the State Budget and national development projects. Corporate sukuk are sukuk issued by companies or business entities to raise funds from the public for use in operational financing, business development, or housing investments. Their issuance is supervised by the Financial Services Authority (OJK) and must comply with Sharia principles. According to the Directorate General of State Assets, the first sukuk issued in Indonesia was a

corporate sukuk by PT Indosat Tbk in 2002, with a value of Rp 175 billion, based on a mudharabah contract. Meanwhile, the first government sukuk was issued in 2008 following the enactment of Law No. 19 on Sharia Government Securities [3].

In the Financial Services Authority (OJK) Annual Report for the 2018–2022 period, Indonesia's corporate sukuk industry showed sustained growth, both in terms of the number of series and the outstanding principal amount, which can be seen on Figure 1. The outstanding value of corporate sukuk increased from 21.30 trillion in 2018 to 42.50 trillion in 2022. Similarly, the outstanding value of government sukuk also rose from 644.95 trillion in 2018 to 1,344.35 trillion in 2022. This indicates that the sukuk market in Indonesia continues to grow and is playing an increasingly important role as a Sharia-compliant financing and investment instrument [4].

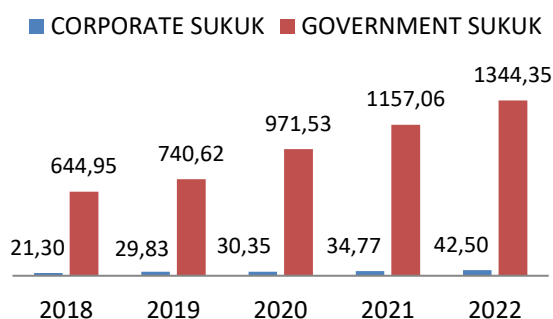


Figure 1. Trends in Outstanding Corporate Sukuk and Government Sukuk in Indonesia, 2018–2022 [4]

Despite rapid growth, the cost of funds for Indonesian corporate sukuk remains relatively high compared to Malaysia. IBPA 2024 data shows that the average spread for A-rated corporate sukuk relative to 5-year SUNs is around 185 bps, while in Malaysia it is only 110 bps for an equivalent rating. This means that corporate sukuk issuers in Indonesia must pay 0.75% more in interest each year. For a 1 trillion-rupiah issuance with a 5-year tenor, the difference amounts to approximately Rp37.5 billion. This high spread has led many corporations to opt for conventional bonds or bank loans. Yet the Indonesian government has set a target of a 20% market share for the Islamic finance sector by 2029. If sukuk pricing remains uncompetitive, that target will be difficult to achieve. The sukuk spread is initially determined in the primary market during the book-building process.

The spread that occurs for the first time in the primary market is known as the Primary Market Spread. The coupon rate set in the primary market will be borne by the issuer until maturity. This differs from the secondary market, where prices can rise or fall based on emerging risks. The spread at the time of an IPO (primary market) is based purely on the information available in the prospectus. Therefore, understanding the factors that

influence investors at the time of sukuk issuance is crucial for issuers, underwriters, and regulators. The sukuk spread at the time of the IPO (Primary Market Spread) reflects the initial risk perception and the pricing agreement between the issuer, the underwriter, and the initial investors [5], [6].

In the primary market, corporate sukuk issuers must offer a markup above the yield on government sukuk to compensate for the additional risk borne by investors for holding corporate instruments. This sukuk spread serves as the risk premium demanded by investors for holding corporate sukuk, which are riskier than government sukuk. Essentially, this spread represents the real cost of capital for the company issuing the sukuk [5], [6], [7].

Leverage, profitability, credit ratings, and the book-to-market ratio are some of the fundamental factors believed to influence corporate sukuk credit spreads. At the time of an IPO, investors will scrutinize the prospectus to assess the extent of the company's debt burden. Trade-off Theory states that high leverage increases the risk of bankruptcy, causing the credit spread to widen. Although high leverage can increase the risk of bankruptcy, optimal leverage can actually reduce costs. Companies with high leverage experience a widening of their sukuk credit spreads because investors demand higher yields to compensate for the risk they face [8].

A company's profitability also determines the sukuk credit spread. More profitable companies are more likely to be able to meet their financial obligations, such as sukuk coupon payments [9]. Therefore, for highly profitable companies, the credit spread tends to be lower. Highly profitable companies have stronger bargaining power when setting sukuk prices. Investors feel more secure, so sukuk issuers do not need to offer a spread that is too wide above the government interest rate. The more profitable a company is, the less likely it is to default [10].

Based on the Fama–French three-factor model, it has been demonstrated that companies with a high book-to-market ratio—categorized as value firms—tend to generate higher rates of return because they carry higher risk compared to companies with a low ratio, or growth firms [11]. This finding confirms that the B/M ratio can be treated as a relevant indicator of systematic risk in the asset pricing process. Company characteristics such as the book-to-market ratio can explain differences in returns and risk for corporate bonds, as well as yield spreads among issuers [12]. In addition to the company's internal factors, external factors, corporate ratings, for example, cannot be ignored when explaining movements in sukuk credit spreads in the financial markets. Corporate ratings, as assessed by independent rating agencies, serve as a significant indicator of the risk of default on sukuk coupons [13].

Research on corporate sukuk credit spreads in Indonesia's primary market remains limited. Yet, sukuk credit spreads in the primary market can be analyzed without being subject to market noise [5]. Most previous studies have focused more on sukuk market developments, macroeconomic factors, and credit spreads in the secondary market, and thus have not provided a comprehensive picture of the mechanisms underlying credit spread formation during initial pricing [14]. In fact, the spreads formed in the primary market serve as the basis for determining the funding costs that issuers will bear until maturity. Therefore, research is needed that specifically examines the influence of corporate fundamental factors on corporate sukuk credit spreads in Indonesia's primary market, thereby contributing to the development of both the literature and the practice of the Islamic capital market.

2. Research Method

This study employs a quantitative approach. The sukuk credit spread serves as the dependent variable, while the independent variables are leverage, proxied by the debt-to-equity ratio (DER); profitability, proxied by return on assets (ROA); credit rating, coded ordinally with a value of 8 representing the highest rating and a value of 1 representing the lowest rating; and the book-to-market ratio.

The population in this study consists of all corporate sukuk issuances in Indonesia during the 2018–2022 period. The sample was selected using purposive sampling. The criteria used to select the sample are as follows:

- Corporate sukuk issued from 2018 through 2022.
- Corporate sukuk with an ± 6 -month issues window relative to government sukuk with the same tenor.

Based on these criteria, 39 corporate sukuk issuances and 10 government sukuk were identified as meeting the requirements for the research sample. Government sukuk data were used as a benchmark for calculating credit spreads based on comparable tenors and were therefore not included in the research sample. The regression model used can be seen on Equation (1).

$$Y_{i,t-1} = \alpha + \beta_1 X1_{i,t-1} + \beta_2 X2_{i,t-1} + \beta_3 X3_{i,t-1} + \beta_4 X4_{i,t-1} + e \quad (1)$$

$Y_{i,t-1}$ is the sukuk credit spread, α is the coefficient, $X1_{i,t-1}$ is the leverage of sukuk issuer i in the previous time period t , $X2_{i,t-1}$ is the profitability of sukuk issuer i in the previous time period t , $X3_{i,t-1}$ is the rating of sukuk issuer i in the previous time period t , $X4_{i,t-1}$ is the book-to-market ratio of sukuk issuer i in the previous time period t , and e is the error term; β_1 , β_2 , β_3 , β_4 = regression coefficients.

3. Result and Discussion

3.1. Descriptive Statistic Analysis

The data used in this study include corporate credit spreads, issuer leverage, issuer profitability, issuer ratings, and the book-to-market ratio of sukuk issuers. The following Table 1 is the results of the descriptive statistical analysis. The results show that the average sukuk credit spread is positive, indicating that sukuk inventors demand compensation for the additional risk they face when investing in corporate sukuk. Furthermore, the credit spread sukuk, leverage (DER), credit rating, and B/M ratio have standard deviations smaller than their means, indicating that the data dispersion is relatively low.

Table 1. Descriptive Statistic

	Credit Spread	Leverage	Profitability	Rating	B/M Ratio
Mean	3.198	2.314	0.003	4.717	2.845
Median	3.120	2.580	0.003	3.000	1.759
Maximum	6.630	5.547	0.030	8.000	9.559
Minimum	0.220	0.367	-0.054	1.000	0.723
Std. Dev.	1.832	1.393	0.014	2.595	2.595
Skewness	0.204	0.528	-1.851	0.333	1.276
Kurtosis	1.856	2.716	9.356	1.371	3.448

The average DER of 2.314 indicates that the companies in the sample have a relatively high level of debt relative to their equity. The average ROA of 0.003 indicates that, in general, the companies are still able to generate profits from their assets. Conversely, ROA has a standard deviation that is greater than its mean, indicating a relatively higher degree of data dispersion.

The average debt-to-equity ratio (DER) of 2.314 indicates that the companies in the sample have a relatively high level of debt utilization compared to their equity. The average return on assets (ROA) of 0.003 indicates that, in general, the companies are still able to

generate profits from their assets. The average credit rating of 4.717 indicates that most sukuk in the sample have fairly good credit quality, reflecting the issuers' ability to meet their payment obligations. The average book-to-market ratio of 2.845 indicates that the companies' book value is higher than their market value. The skewness values show that all variables, except profitability, have a right-skewed distribution. Based on the kurtosis values, profitability and the book-to-market ratio tend to have a leptokurtic distribution, while the other variables are relatively normally distributed.

3.2. Classic Assumption

3.2.1. Normality Test

This test is important because a good regression model is one in which the residuals or data are normally distributed. If the probability value of the Jarque-Bera

test is > 0.05 , then the data are normally distributed [15]. As shown in Figure 2, the Jarque-Bera value is greater than 0.05. In this study, the number of observations is 39 > 30 ; therefore, the data are assumed to be normally distributed.

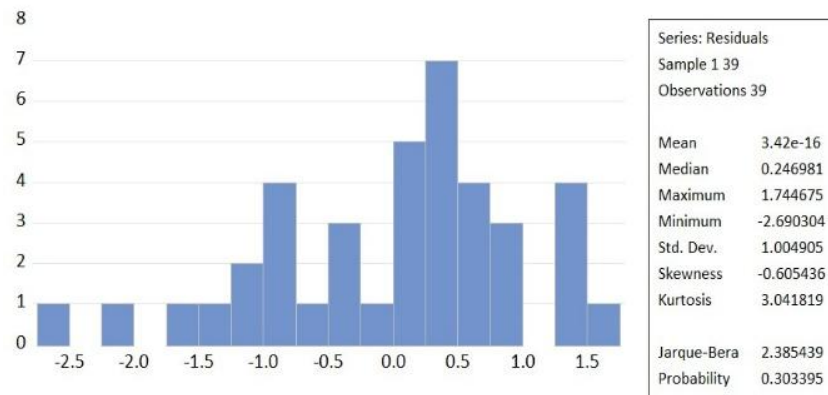


Figure 2. Result of Normality Test

3.2.2. Multicollinearity Test

The multicollinearity test is designed to determine whether multicollinearity exists. If each independent variable has a Variance Inflation Factor (VIF) < 10 , the regression model can be said to be free of multicollinearity. Based on the test results in Table 2, each independent variable has a VIF < 10 . Therefore, it can be concluded that there is no multicollinearity between the dependent variable and the independent variables.

Table 2. Result of Multicollinearity Test

Variable	VIF	Conclusion
Leverage	1.231	There is no multicollinearity
Profitability	1.032	There is no multicollinearity
Rating	1.205	There is no multicollinearity
B/M Ratio	1.084	There is no multicollinearity

3.2.3. Heteroskedasticity Test

A model is considered to be free of heteroscedasticity if the Glejser test's Obs*R-squared value has a Chi-Square Prob. > 0.05 . Conversely, if the Chi-Square Prob. is ≤ 0.05 , then there are signs of heteroscedasticity [16]. Table 3 shows the results of the heteroscedasticity test for the probability value of Obs*R-Squared based on the Glejser test, which is $2.596 > 0.05$. Therefore, it can be

concluded that there is no evidence of heteroscedasticity in this study.

Table 3. Result of Heteroskedasticity Test

Heteroskedasticity Test: Glejser			
F-statistic	0.606	Prob. F(4, 34)	0.6607
Obs*R-squared	2.596	Prob. Chi-Square (4)	0.6374
Scalled explained SS	2.199	Prob. Chi-Square (4)	0.6992

3.3. Multiple Linear Regression Analysis

Based on the regression test results on Table 4, the leverage (DER) and profitability (ROA) variables have probability values of 0.091 and 0.418, respectively, indicating that neither has a significant effect on sukuk credit spreads in the primary market. On the other hand, the rating variable has a regression coefficient of -0.538 with a p-value of 0.000, indicating a negative and significant effect on sukuk credit spreads. Meanwhile, the book-to-market ratio variable has a regression coefficient of 0.173 with a p-value of 0.017, indicating a positive and significant effect on sukuk credit spreads. Based on the regression estimation results, the Adjusted R^2 value is 0.663, which means that 66.38% of the variation in sukuk credit spreads can be explained by the independent variables in this study, while 33.62% is explained by other factors outside the research model.

Table 4. Result of Multiple Linear Regression Analysis

Variable	Coefficient	Stand. Error	t-Statistic	Prob.
α	5.833	0.416	14.081	0.0000
Leverage (X1)	-0.238	0.137	-1.734	0.0918
Profitability (X2)	-10.250	12.507	-0.819	0.4182
Rating (X3)	-0.538	0.072	-7.390	0.0000
B/M Ratio (X4)	0.173	0.069	2.509	0.0170
R-squared	0.699			
Adjusted R-Squared	0.663			
S.E. of Regression	1.062			

3.4. Discussion

3.4.1. The Influence of Leverage on Credit Spread Sukuk

Based on the results of this study, investors in corporate sukuk in Indonesia do not consider the leverage of sukuk issuers when demanding a risk premium. This differs from the Trade-off Theory, which states that high debt increases a company's financial risk, leading investors to feel the need to obtain a higher return as compensation for the greater risk. The lack of a significant effect of sukuk issuers' leverage on corporate sukuk spreads is likely related to the level of leverage among sukuk issuers.

According to Financial Services Authority Regulation No. 35/POJK.04/2017, one of the criteria for sharia-compliant securities is that the ratio of total interest-bearing debt to total assets must not exceed 45% [17]. This requirement means that sukuk issuers tend to maintain more controlled debt levels, resulting in relatively small variations in leverage across companies. Furthermore, unlike conventional bonds—which are highly sensitive to capital structure (leverage)—the risk level of sukuk depends heavily on the quality of the underlying assets and the structure of the contract (such as *Ijarah* or *Mudharabah*). Primary market investors are likely to focus more on legal compliance, cash flows from the underlying assets, and the issuer's reputation (corporate governance) than on leverage. Capital structure (leverage) does not significantly affect sukuk due to risk mitigation through the availability of real underlying assets [18].

3.4.2. The Influence of Profitability on Credit Spread Sukuk

Based on the results of this study, corporate sukuk investors in Indonesia do not consider historical profitability information of sukuk issuers from the quarter prior to sukuk issuance. This historical information may already be fully factored into the sukuk rating, meaning that past profitability is already reflected in the sukuk issuer's credit rating. Sukuk investors in the primary market may also focus on the quality of the underlying asset's cash flow and the Sharia contract, rather than ROA. Investors do not consider the company's profitability as a primary factor in determining the sukuk's rate of return but instead pay more attention to other factors such as ratings and credit risk [19].

3.4.3. The Influence of Rating on Credit Spread Sukuk

A sukuk rating is an assessment issued by a rating agency regarding a company's ability to meet its obligations to repay the principal and pay the yield on the sukuk in a timely manner. A credit rating reflects the issuer's creditworthiness and probability of default (default risk). The higher the credit rating an issuer achieves, the lower the investment risk is considered to

be. Because the risk is low, the credit spread relative to government sukuk (the benchmark) will narrow (decrease). Based on signaling theory, this rating serves to reduce information asymmetry between the issuer and investors, thereby influencing investors' perception of risk. This situation leads investors to demand a lower credit spread because the investment risk is assessed as lower [20].

3.4.4. The Influence of Book-to-Market Ratio on Credit Spread Sukuk

A high book-to-market ratio indicates a value-oriented company (where the book value of its assets exceeds its market valuation). Companies with substantial tangible assets may be perceived as offering a higher level of security by sukuk investors [21]. In the event of a default, the ability to liquidate assets to cover liabilities is far more assured. This lower risk makes investors willing to accept lower coupons, causing the credit spread relative to government sukuk to narrow (become negative). Additionally, sukuk require sharia-compliant underlying assets [22]. The abundance of these real assets provides psychological protection for investors in the primary market. These positive signals and the availability of assets may significantly reduce the risk premium (spread); this finding aligns with the principle that sukuk derive their strength primarily from their underlying assets.

4. Conclusion

Investors in corporate sukuk in Indonesia do not consider the issuer's leverage when demanding a risk premium. Sukuk investors in the primary market are likely to focus more on Sharia compliance, cash flows from the underlying assets, and the issuer's reputation (corporate governance) than on capital structure. Historical profitability data is already fully factored into sukuk ratings; therefore, profitability does not significantly affect the sukuk credit spread, whereas the issuer's rating has a significant influence. Companies with substantial tangible assets (high B/M ratio) are perceived by sukuk investors as having a higher level of security, which affects the credit spread of corporate sukuk in Indonesia. This study is still limited to corporate fundamentals; therefore, future research is recommended to include other variables that may potentially influence sukuk credit spreads, such as macroeconomic factors, expand the sample size, and extend the observation period to obtain more comprehensive results.

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