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Article

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THE RIGHT PURPOSE ON THE RIGHT COVENANT: DOES THE LOAN PURPOSE AFFECT THE DEBT COVENANT THROUGH THE *ṢUKŪK* RATING?

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ABSTRACT

Purpose — This paper aims to determine the influence of the purpose for issuing *ṣukūk* (operations, financing, and investment/acquisition) on different types of debt covenants (balance sheet, income statement, and collateral-based covenants). It also examines the ability of the *ṣukūk* rating to mediate the relationship between loan purposes and debt covenants.

Design/Methodology/Approach — The research data were 236 *ṣukūk* that were listed on the Indonesia Stock Exchange (IDX) until December 2020. They were collected through the IDX official website. Logistic regression and the Sobel test were used to test the direct and indirect influences among the variables studied.

Findings — The results showed that loan purposes affected the types of debt covenants. Loans for operational purposes seemed to be in accordance with the debt covenant with restrictions on income statement (IS), balance sheet (BS) and collateral. Loans for investment/acquisition were more appropriate to both BS and collateral-based debt covenants, while loans for financing were better suited to BS-based debt covenants. This study also proves that the *ṣukūk* rating could mediate associations between loan purposes, especially for investment/acquisition, and the types of debt covenants.

Practical Implication — This research is useful for *ṣukūk* investors to consider the investment by looking at the purposes, ratings and *ṣukūk* covenants. In addition, it is helpful for *ṣukūk* holders, represented by trustees, in determining debt covenants in the form of *ṣukūk* with different purposes.

Research Implication — The results of this study described how accounting information improved contract efficiency. This research provided important evidence of the association between the structure of debt covenants and loan purposes. It provided empirical evidence of the debt covenant hypothesis in agency theory on the importance of designing debt contracts to reduce monitoring costs.

Originality/Value — This study employed the debt covenant on *ṣukūk* in Indonesia. The use of the *ṣukūk* rating as an intervening variable between loan purpose and debt covenant has not been studied previously. This study also divided debt covenant into four types by adding the collateral-based debt covenant because *ṣukūk* are different from other types of debt and require underlying assets in their issuance.

Keywords — Debt covenant, Loan purpose, *Ṣukūk*, *Ṣukūk* rating
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INTRODUCTION

Debt covenants often follow public company bond contracts, including *ṣukūk* (Islamic bonds). There is still incomplete information about economic factors in the preparation of debt contracts (Dichev & Skinner, 2002). Demerjian (2011) and Paik *et al.* (2019) documented an increase in the income statement (IS)-based ratio and a decrease in the balanced sheet (BS)-based ratio in debt covenants over time. Besides referring to the accounting figures, this study also examined public debt contracts based on collateral (Nikolaev, 2010; Sulistiani, 2018) because the issuance of *ṣukūk* requires an underlying asset to prevent money-for-money transactions that would lead to usury.

The agency conflicts described in agency theory are used in both investing and financing decisions (Jensen & Meckling, 1976). There are three hypotheses about the opportunistic behaviour of managers, one of which is the debt covenant hypothesis (Watts & Zimmerman, 1978). Financial ratios based on the BS and IS serve different purposes in debt covenants (Christensen & Nikolaev, 2012). Previous research developed the loan purpose into three classifications, notably: operations, financing, and investment/acquisition (Skousen *et al.*; Song & Sun, 2018; Paik *et al.*, 2019). It is also important for *ṣukūk* holders to know the right type of debt covenant based on the purpose of the debt.

Research on private debt and bonds provides evidence that the purpose of debt for operations and financing prefers a BS-based debt covenant, whereas that aimed at investment or acquisition tends to use an IS-based covenant (Skousen *et al.*, 2018; Paik *et al.*, 2019). Christensen and Nikolaev (2012) argue that a company's financial constraints influence the choice of financial ratios in BS- or IS-based covenants. It is found that there is an increasing number of IS-based ratios and decreasing number of BS-based ratios in debt covenants over time (Demerjian, 2011; Christensen & Nikolaev, 2012). In previous research, the purpose of debt has a positive effect on bond ratings (Skousen *et al.*, 2018). Meanwhile, other studies provide evidence of the influence of bond ratings on the type of debt covenant, although the results are inconsistent (Demerjian & Owens, 2016; Alexander *et al.*, 2017; Carrizosa & Ryan, 2017; Levy & Shalev, 2017; Yang, 2017). Based on the results of previous research, *ṣukūk* rating can be used as an intervening variable that mediates the association between loan purpose and debt covenant.

The purpose of this study is to determine the effect of loan purposes (operations, financing, and investment/acquisition) on debt covenants (BS, IS, both IS and BS, and collateral). It also examines the indirect effect of loan purposes and debt covenants through the *ṣukūk* rating. It is different from previous research in the following ways:

1. It has an intervening variable, namely the *ṣukūk* rating, which is expected to be able to mediate the association between loan purposes and debt covenants.
2. It combines the dependent variable that has been used in previous research, which classifies IS- and BS-based debt covenants (Demerjian, 2011; Christensen & Nikolaev, 2012; Demerjian & Owens, 2016; Paik *et al.*, 2019) and collateral-based covenants (Nikolaev, 2010; Sulistiani, 2018).
3. It uses a sample of corporate *ṣukūk* issued by the Indonesia Stock Exchange (IDX). Global corporate *ṣukūk* issuance has fluctuated in the last ten years; it rose in 2016 but then decreased in 2017. Meanwhile, corporate *ṣukūk* in Indonesia, the largest Muslim-majority country in the world, has increased from year to year, according to Fitch Ratings. Therefore, it is pertinent to conduct further research on the development of corporate *ṣukūk* in Indonesia.

This article is organised as follows: the next section discusses the proposed theory, and the hypotheses are elaborated. Then, the research methodology including data collection is described. Thereafter, the statistical test results, findings, and implications of the study are presented. Finally, the last section provides the conclusions and limitations of the study.

LITERATURE REVIEW

Agency Theory

Jensen and Meckling (1976) define an agency relationship as a contract in which one or more principals (owners) use other people or agents (managers) to carry out company activities. The strategies that can be used to reduce agency costs can be implemented in several ways: increasing insiders' ownership, increasing the dividend payout ratio, and increasing funding with debt, which will reduce the amount of conflict between shareholders (principals) and managers (agents), as well as institutional investors as monitoring agents. According to Watts and Zimmerman (1978), there are three hypotheses that are generally associated with the opportunistic behaviour of managers, namely: the bonus plan hypothesis, the debt covenant hypothesis, and the political cost hypothesis. The debt covenant hypothesis is related to the conditions that a company must meet in a debt covenant. Therefore, it is necessary to have a covenant among managers, who in this case also represent the interests of stockholders and bondholders, to reduce monitoring costs (Jensen & Meckling, 1976). Knowledge of debt covenants will reduce the risk of default on public debt securities, in this case, *ṣukūk*. Research on debt contract design has been previously investigated (Chava & Roberts, 2008; Demerjian, 2011; Christensen & Nikolaev, 2012). Paik *et al.* (2019), on their part, examine the association between loan purposes and debt covenants. This research contributes to the literature by providing evidence that different loan purposes require different debt covenants.

Ṣukūk

According to Klein *et al.* (2018), there are similarities and differences between *ṣukūk* and bonds. Like bonds, *ṣukūk* have a maturity date, providing income and repayment to the holder. *Ṣukūk* (that are asset-backed) represent ownership of tangible assets, so their value does not depend on the creditworthiness of the issuer, unlike bonds. *Ṣukūk* refer to bonds that are structured according to Sharīʿah (Islamic law) (Soudani, 2012; Akin *et al.*, 2016; Khan *et al.*, 2020). Instead of using interest for coupon payments, fees are used as coupon payments for *ijārah ṣukūk* (leasing) (Siswantoro, 2018). There are two structures of *ṣukūk*. One involves a special purpose vehicle/entity (SPV/SPE) where an asset is purchased by an intermediary, which is then sold to *ṣukūk* holders. The second type pertains to the issuance of *ṣukūk* without using an SPV, when the issuer has a direct relationship with the assets guaranteed in the issuance of the *ṣukūk*.

Ṣukūk have provisions that are different from conventional bonds. They are not claimed on cash flows and cannot be based on a pool of receivables. *Ṣukūk* are collateralized whereas conventional bonds are not. It thus looks logical if *ṣukūk* are issued by riskier companies, while bonds are issued by stronger companies with stable cash flows (Sherif & Erkol, 2017). Meanwhile, Alam *et al.* (2018) found that *ṣukūk* are not riskier than conventional bonds. Returns of the *ṣukūk* are derived from either the performance of the underlying project/asset or the contractual agreement based on this project/asset. Meanwhile, knowledge about how to make debt covenants

is required in the issuance of *ṣukūk* as they involve a debt obligation that may be different from bonds and other debt contracts that have been previously studied.

Loan for Operational Purposes

Firms with more concentrated customer bases have higher loan spread and shorter loan maturity and are more likely to issue secured loans. These negative effects disappear when the supplier firm maintains a strong relationship with its customers (Yang, 2017). Loan officers have a significant influence on interest spreads, loan covenant designs, and loan performance (Bushman *et al.*, 2021). Meanwhile, another research has shown that if a company borrows funds for daily company operations or for funding purposes, lenders are more likely to use the BS metric than the IS metric in debt covenants (Paik *et al.*, 2019). The research to date has been conducted on private debt, which may be different from public debt in the form of *ṣukūk*. Research on a loan purpose appropriate for the type of collateral-based debt covenant has not been conducted previously. Based on the results of the research above, it can be understood that a collateral-based debt covenant is suitable for debt with a shorter term with a high loan spread. This is related to the characteristics of the loan purpose for operations, such loans usually being for a shorter term than for loans for other purposes. In addition, when the purpose is for operations/working capital, it is, of course, aimed at seeking business profits. Thus, this type of debt will provide a higher loan spread compared to others so that the covenant is more suitable based on the collateral. Therefore, the following hypothesis is derived:

H1a. Debt that is intended for operations is more likely to make use of collateral-based debt covenants than other types of debt.

Loan for Financial Purposes

Investors need information on BS ratio to determine the quantum of a company's debt capacity. The BS ratio also provides the possibility to generate a summary of the main information related to the borrower's financial position, such as solvency and liquidity (Paik *et al.*, 2020). The results of recent research indicate that companies with financial restrictions are less likely to use BS-based ratios compared to IS-based ratios in issued debt covenants (Paik *et al.*, 2020). Other studies also provide a similar conclusion, that the financial characteristics of the debtor need to be considered in establishing a debt covenant (Dichev & Skinner, 2002). In addition, several studies show that there is good documentation of the decline in BS-based debt covenants from period to period (Dyreng, 2009; Demerjian & Owens, 2016; Nikolaev, 2017; Nikolaev, 2018). Meanwhile, the decrease in use of BS-based covenants is due to changes in accounting standards that use the BS approach more in preparing financial statements (Demerjian & Owens, 2016). These changes make BS less useful in establishing debt covenants due to an increase of volatility in fair value, especially in asset and liability accounts. The role of the BS covenant is to align the interests of the lender-borrower by requiring the debtor to maintain sufficient capital in the company (Christensen & Nikolaev, 2012). The BS covenant relies on information about the source and use of capital, thereby directly limiting the debt level in the company's capital structure (Nikolaev, 2017). In the preparation of debt covenants on loans aimed at daily activities (operations), borrowers and lenders must pay attention to capital adequacy to ensure that the borrower is able to pay off the debt, including the interest on the loan (Nikolaev, 2018). BS provides summaries and reports company information including capital structure. Based on the explanation above, the following hypothesis is put forward:

H1b. Debts that are intended for funding are more likely to choose BS-based debt covenants than others.

Loan for Investment/Acquisition Purposes

Christensen and Nikolaev (2012) as well as Paik *et al.* (2019) examine the debt covenant by including an additional factor, namely the loan purpose. The studies assume that the loan purpose can affect the type of debt covenant, whether based on BS or IS. Lenders are of the view that the use of money from loan proceeds will be directly related to loan risk. Companies that borrow money for acquisitions or investment purposes will be considered riskier loans than loans to fund day-to-day operating activities. The loan purpose for investment or acquisition activities usually requires a relatively rather long time; therefore, it has a higher risk. For this reason, debt covenants are needed that are able to provide better financial information related to the future, such as in the IS metric. In determining long-term debt agreements such as acquisitions, takeovers, equipment purchases, leveraged purchases, capital expenditures and so on, the lender must ensure that the borrower has sufficient profitability and future cash flows to support the loan. Other evidence is obtained from research which shows that loans used for long-term activities are more suitable for using IS-based debt covenants (Paik *et al.*, 2019). The profitability of a company is summarised and reported in the IS. Therefore, the IS is suitable for debt that is intended for investment or acquisition. The research hypothesis can be described as follows:

H1c. Debt that is intended for investment or acquisition is more likely to use IS-based debt covenants than others.

***Ṣukūk* Rating**

Bond ratings are an important indicator of a company's credit quality (Andrew & Baker, 2020). Siddiqi (2006) examined the determinants of the source of a company's debt. He found that good quality companies proved to have high ratings that were more suitable for public debt contracts, while low quality companies preferred to borrow from banks. Chiang *et al.* (2017) found that companies with good quality offerings influence the formation of covenants. Several studies conducted by Frankel *et al.* (2008), Frankel and Litov (2007), and Alcock *et al.* (2019) found a negative effect between bond quality and covenant production. Meanwhile, some other studies conducted by Beatty *et al.* (2002), Asquith *et al.* (2005), Bharath *et al.* (2008) and Sulistiani (2018) found a positive influence. Besides, other studies conducted by Siddiqi (2006), Billett *et al.* (2007) and Inamura (2009) did not find any influence between those two variables. Following a change in the broad credit ratings level, firms issue less net debt relative to equity after an upgrade to investment grade (Aktan *et al.*, 2019).

The results of the above research have proven the importance of credit ratings for both companies and investors. Skousen *et al.* (2018) found that the loan purpose has a positive effect on bond ratings. Meanwhile, other studies provide evidence of the influence of bond ratings on the type of debt covenant, although the results are inconsistent (Demerjian & Owens, 2016; Alexander *et al.*, 2017; Carrizosa & Ryan, 2017; Levy & Shalev, 2017; Yang, 2017). The results of the research above prove that the loan purpose affects the debt rating, and the debt rating then affects the debt covenant. So, it can be concluded that the *ṣukūk* rating may be an intervening variable that mediates the relationship between the loan purpose and debt covenants. The last hypothesis is derived as follows:

H2: The *ṣukūk* rating can mediate the effect of the loan purpose on the debt covenant.

METHODOLOGY

Sample

This study uses the IDX database to collect data on *ṣukūk* that were still in circulation as of 31 December 2020. The sampling method used is purposive sampling, identifying a final sample of 236 *ṣukūk*. **Table 1** presents the sample selection procedure.

Table 1: Sample Selection Procedure

Description	Number of *Ṣukūk*
Ṣukūk which are still in circulation up to December 2020	250
Less: *Ṣukūk* in the medium term note (MTN) category	9
Less: *Ṣukūk* whose company is bankrupt	1
Less: *Ṣukūk* that failed to pay before 2020	3
Less: *Ṣukūk* with incomplete data	1
Final sample	236

Source: Indonesia Stock Exchange (www.idx.co.id)

The purpose of this study was to measure the effect of loan purposes (operations, financing, and investment) on the inclusion of a debt covenant based on BS, IS, both IS and BS, and collateral. However, this research model also includes several control variables that indicate loan properties (maturity, deal size, and firm age). These variables have been important in the analysis of debt covenants in previous studies (Christensen & Nikolaev, 2012; Paik *et al.*, 2019). The types of debt covenant data, the purpose of debt, *ṣukūk* rating, and control variable data for each *ṣukūk* were obtained from annual reports, the Indonesian Bond Market Directory (IBMD), and the prospectuses published on the official website of the IDX. The debt covenant is divided into several sub-categories of financial ratios that are used as a condition for determining whether they were based on IS, BS, both IS and BS, or collateral. Restrictions of these accounting figures include: current ratio, earnings before interest, taxes, depreciation and amortization (EBITDA) to net interest ratio, liability to equity, EBITDA to interest expense, sales of assets, net liability to EBITDA, total equity, asset restriction, total liability to total assets, dividend restriction, earning assets to liability, capital adequacy ratio (CAR), debt to equity ratio (DER), interest coverage ratio, debt service coverage ratio, no collateral for assets, no merger, no shares acquisition, no long-term debt, reduced authorised capital, no change in the field of business, and a collateral with certain assets.

This study uses the following specifications to model the possibility of a collateral based covenant, BS or IS as part of the debt covenant:

$$IS\ covenant_{it};\ BS\ covenant_{it};\ Both\ covenants;\ Collateral\ covenant = f\ (\beta_{0k} + \beta_{(k\ to\ 3k)}) * Loan\ purpose_{it} + \beta_{4k} * Maturity_{it} + \beta_{5k} * Deal\ size_{it} + \beta_{6k} * Firm\ age_{it}$$

……(equation for H1a-H1c)

$$IS\ covenant_{it};\ BS\ covenant_{it};\ Both\ covenants;\ Collateral\ covenant = f\ (\beta_{0k} + \beta_{(k\ to\ 3k)}) * Loan\ purpose_{it} + \beta_{4k} * Maturity_{it} + \beta_{5k} * Deal\ size_{it} + \beta_{6k} * Age_{it} + \beta_{7k} * Ṣukūk\ rating_{it}$$

……(equation for H2)

Where k indicates the inclusion of BS-based, IS-based or collateral-based ratios.

Measure

Based on the research model, data for all variables are measured based on **Table 2**.

Table 2: Variable Measurement

Variables	Measurement	Scale
Dependent Variables		
IS covenant$_{it}$ (Y1)	1 if the debt covenant has only an IS-based covenant; 0 otherwise	Nominal
BS covenant$_{it}$ (Y2)	1 if the debt covenant has only a BS-based covenant; 0 otherwise	Nominal
Both covenants$_{it}$ (Y3)	1 if the debt covenant has a BS-based and IS-based covenant; 0 otherwise. This serves as a reference category in the model.	Nominal
Collateral covenants$_{it}$ (Y4)	1 if the debt covenant has only a collateral-based covenant; 0 otherwise	Nominal
Independent Variables		
Loan purpose operation$_{it}$ (X1)	1 if the loan purpose is to fund day-to-day operations of the company; 0 otherwise	Nominal
Loan purpose finance$_{it}$ (X2)	1 if the loan purpose is to fund financing activities; 0 otherwise	Nominal
Loan purpose inv&acq$_{it}$ (X3)	1 if the loan purpose is to finance investment or acquisition activities; 0 otherwise	Nominal
Intervening Variables		
Ṣukūk rating$_{it}$ (Z)	*Ṣukūk* rating issued by Pefindo 1 = rating CCC and D 2 = rating B-, B, B+ 3 = rating BB-, BB, BB+ 4 = rating BBB-, BBB, BBB+ 5 = rating A-, A, A+ 6 = rating AA-, AA, AA+ 7 = rating AAA	Ordinal
Control Variables		
Maturity$_{it}$ (C1)	The natural logarithm of loan maturity (in years)	Ratio
Deal size$_{it}$ (C2)	The natural logarithm of the total agreed loan value	Ratio
Firm age$_{it}$ (C3)	The natural logarithm of the firm's age (in years)	Ratio

Source: Authors' own

The Wald test was used in this research to investigate the effect of loan purpose and debt covenant. Binary logistic regression can be used to predict the nominal scale of a dependent variable (dummy variable, choice 1 or 0) in determining the percentage of variance in the dependent variable which can be explained by the independent variable (Gujarati & Porter, 2009). Meanwhile, to test the second hypothesis, multinomial logistic regression was used to test the effect of loan purpose on the *ṣukūk* rating, and binary logistic regression was used to test the *ṣukūk* rating on the debt covenant. Furthermore, the Sobel test was carried out to determine the indirect effect of loan purposes and debt covenants through a *ṣukūk* rating, with the following formula:

$$sab = \sqrt{b^2sa^2 + a^2sb^2 + sa^2sb^2}$$

Meanwhile, to test the significance of the indirect effect, it is necessary to calculate the *t* value of the *ab* coefficient with the following formula:

$$t = \frac{ab}{sab}$$

To simplify the calculation, the Sobel test was carried out via the link http://quantpsy.org/sobel/sobel.htm.

FINDINGS

Basic Statistics

Descriptive statistics were calculated to determine the distribution of the research data. **Table 3** presents the descriptive statistical results for the variables included in the main regressions of this study.

Table 3: Basic Statistics

	Minimum	Maximum	Mean	Median	Standard Deviation
DC-IS (Y1)	0	1	.48	.00	.501
DC-BS (Y2)	0	1	.86	1.00	.348
DC-both (Y3)	0	1	.48	.00	.501
DC-CL (Y4)	0	1	.19	.00	.394
LP-operational (X1)	0	1	.62	1.00	.487
LP-financial (X2)	0	1	.21	.00	.406
LP-investment (X3)	0	1	.54	1.00	.500
Ṣukūk rating (Z)	1	7	6.26	7.00	1.087
Log maturity (C1)	.00	1.30	.6327	.6990	.32395
Log deal size (C2)	3.20	6.30	5.0595	5.1292	.53169
Log firm age (C3)	.70	2.08	1.5787	1.6839	.25932

Source: Authors' own

Based on **Table 3**, the observations were carried out on 236 *ṣukūk* that were still in circulation as of 31 December 2020, which were issued by companies listed on the IDX. The debt covenant data based on IS and Both (IS and BS) are the same because the issuance of *ṣukūk* is not only IS-based in the debt covenant. All debt covenants based on IS must also require BS in them so that the data is the same as for Both (IS and BS). This is a form of prudence in debt covenants, especially for *ṣukūk*, which require an underlying asset, so that the BS number is very important to enforce restrictions. The tight agreement signals companies that are underperforming at the time of the loan initiation but expect performance improvements in the future. These companies are required to report their future prospects, accept weaker covenant protection over the grace period, and have stronger control rights in the subsequent periods (Li *et al.*, 2016; Rhodes, 2016). Therefore, debt covenants must be determined carefully, and errors in their determination can lead to defaults on public debts issued. The presented data prove the fundamental difference between *ṣukūk* and conventional bonds.

The mean of the *ṣukūk* that uses debt covenants based on IS and Both (IS and BS) is 0.48, which equates to less than half of the total observations. Meanwhile, the BS-based covenant shows an average of 0.86, which means that more *ṣukūk* use BS than IS. This is different from the research conducted by Paik *et al.* (2019), which focused on private debt and stated that IS-based debt covenants have increased from year to year while those based on BS have decreased.

Meanwhile, in terms of *ṣukūk*, the results are different; the debt covenant is not only based on IS, which focuses on financial performance but also looks at BS information to see the company's financial position, especially in terms of asset ownership. This finding provides new evidence that rejects the results of the previous research of Paik *et al.* (2019) in which the object used is in the form of *ṣukūk*. Based on **Table 3**, the type of debt covenant in the form of *ṣukūk* is at least based on collateral, which is 19 per cent or as many as 45 *ṣukūk*. This type of covenant requires a special collateral for the issuance of the *ṣukūk*; however, most *ṣukūk* do not provide specific collateral when they are issued, but there are restrictions on the value of assets in the BS report.

The purpose of most public debt is for operations, followed by investment, and the least common use is for financial purposes with the following values: 0.62, 0.54, and 0.21 respectively. These data prove that the majority of companies in Indonesia issue their *ṣukūk* to meet working capital or for their operational needs. Meanwhile, companies rarely issue *ṣukūk* for financial purposes or debt payments to other parties. Companies must carefully consider the reason for issuing public debt, because they not only have an obligation to provide returns to *ṣukūk* holders, but their reputation also is at stake; they cannot fail to pay because this, of course, would affect the value of the company.

The data in **Table 3** indicate a high *ṣukūk* rating mean, namely 6.26, which implies that the *ṣukūk* issued on the IDX have an average rating of AA to AAA. The issuance of debt in the form of *ṣukūk* is followed by a more detailed debt covenant compared to bonds due to special provisions in the issuance. This makes companies more careful in their financial reports because both the IS and BS figures will be monitored, as well as additional collaterals.

In terms of the control variable, the descriptive statistical data show that the average debt period is 5.5 years, which means the period is shorter relative to bonds (9.49 years) (Bai *et al.*, 2019). Most sample private loan facilities are short- to medium-term obligations, with a median maturity of just under three years (Dichev & Skinner, 2002). Based on existing data, long-term *ṣukūk* are usually issued by Indonesian state-owned enterprises (BUMN), whose majority shares are owned by the government, which certainly have a relatively small risk of default. The average outstanding *ṣukūk* is IDR 206,405,000,000 with the average age of the company being 44 years. This illustrates that the companies that have issued *ṣukūk* are long-established companies that can issue loans with a large value. Generally, the older a company is the higher the confidence of investors and creditors because it is considered to have more experience compared to companies that are still newly established. Many companies choose to increase the amount of credit and reduce the issuance of their shares, one of which is caused by credit alternatives such as *ṣukūk*. In addition, it is also due to the difference in interest. The rate of conformity between financial income and taxable income decreases as debt covenant pressure increases (Chava & Roberts, 2008; Dyreng, 2009). Companies can also face a greater likelihood of losing control of rights through debt restructuring or accelerating debt repayments (Alexander *et al.*, 2017; Elnaby *et al.*, 2017). So, it can be concluded that the term of the debt, the amount of debt, and firm age can indeed affect the type of debt covenant selected in the *ṣukūk* issuance.

Hypotheses Result

After the data were determined through descriptive statistics, the hypotheses were tested, and divided into H1a, H1b, and H1c. The results of statistical tests using binary logistics are presented in **Table 4**.

Table 4: Loan Purpose against Debt Covenant

Variable	DC-IS	DC-BS	DC-Both	DC-Collateral
LP-operational	4.053***	.121***	4.053***	8.136***
LP-financial	.640	.271**	.640	1.922
LP-investment/acquisition	.567	2.941**	.567	.311***
Maturity	1.972***	1.316***	1.972***	.732***
Deal size	1.358	.743	1.358	1.014
Firm age	1.011	.988	1.011	1.001

Note: ***significant at 1%, **significant at 5%, *significant at 10%
Source: Authors' own

Based on **Table 4**, the purpose of debt used for operations is proven to influence the four types of debt covenants, namely based on IS, BS, both (IS and BS), and collateral. Meanwhile, debt for financial purposes is proven to affect the BS-based debt covenant. Investment/acquisition debt has an effect on the loan purpose based on BS and collateral. In the control variable, only the debt period (maturity) can influence all types of debt covenants based on IS, BS, both (IS and BS), and collateral.

The results of the statistical test for IS-based debt covenants and both (IS and BS) are the same because an IS-based debt covenant is always accompanied by a BS-based covenant. These results indicate that in the *ṣukūk* agreements in Indonesia, BS is more widely used as the basis for determining the debt covenant compared to IS. This is not related to the previous research which states that there is a decrease in the use of BS ratios in debt covenants caused by changes in accounting standards towards the BS approach in the financial report (Dyreng, 2009; Demerjian & Owens, 2016; Nikolaev, 2017; Nikolaev, 2018). The information in BS is considered less useful in the preparation of debt covenants because it contains increased volatility regarding the fair value of assets and liabilities. Meanwhile, this study, using a *ṣukūk* sample that has different characteristics from bonds and other private debts, shows different results. Figures in BS are necessary for *ṣukūk*, which require an underlying asset in their issuance, so the information about the numbers in the BS is needed to know the change in the value of assets.

Furthermore, the most significant influence is sought in the order of the degree of confidence of 1 per cent, 5 per cent, and 10 per cent with the highest value of the Beta coefficient determining the suitability of the loan purpose and the debt covenant. Based on **Table 4**, conclusions are drawn about the hypotheses tests which are presented in **Table 5**.

Table 5: Hypotheses Testing

Hypotheses	Relationship	Standard beta	Wald	p-value	Decision
H1a	LP-Op → DC collateral	8.136	20.076	.000***	Supported
H1b	LP-Fin → DC-BS	.271	5.347	.021**	Supported
H1c	LP-Inv → DC-IS	.567	2.262	.133*	Not supported

Note: ***significant at 1%, **significant at 5%, *significant at 10%
Source: Authors' own

It can be shown from **Table 5** that the purpose of debt for operations is related to all types of debt covenants, but it is most appropriate for those based on collateral. This is in accordance with the statistical results, which show a significance level of 1 per cent with the largest coefficient (8.136).

These results also prove that the purpose of debt for operations requires a more complex accounting number boundary for both the numbers in IS and BS; and besides that, it still requires certain collaterals. Based on these results, it proves that H1a in this study is accepted, that the objective of operational debt is more compatible with a collateral-based debt covenant. This result is slightly different from the previous research of Paik *et al.* (2019) which states that the objectives of operational debt are more compatible with BS-based debt covenants. In this study, debt for operational purposes is not only limited in BS figures but also in IS and requires certain collaterals in the issuance of the *ṣukūk*. However, the results of this research are in accordance with Yang (2017), who stated that secured loans prefer to use a collateral-based debt covenant with a shorter loan term. This study provides evidence that debt for operational purposes is repaid over a shorter period and is more in line with collateral-based debt covenants. These results also indicate that differences in the object of research in the form of *ṣukūk* also affect the suitability of the loan purpose against its debt covenants.

Table 5 also shows the results of hypothesis H1b, that a BS-based debt covenant is more appropriate for use with debt for finance, with a significance value at the 5 per cent level. These results are in accordance with the other previous research (Paik *et al.*, 2019) which presented similar results. Debt that is used for finance (paying other debts) must, of course, be supported by a certain number of assets that are limited to use in a debt covenant to reduce credit risk. Ratios based on BS provide the financial information needed by creditors, such as liquidity and solvency, so that they are in line with the requirements of loans for financial interests (Paik *et al.*, 2020). This statement is also supported by another research which states that creditors adjust the covenant to reflect the borrower's financial characteristics (Dichev & Skinner, 2002). This study proves that *ṣukūk* debt is the same as other types of debt, in terms of financial loan purposes that are in accordance with the BS-based debt covenant.

Meanwhile, debt for investment/acquisition is more suited to a debt covenant that is based on BS and collateral. However, the highest significance value is collateral-based with a significance level of 1 per cent compared to BS-based with a significance level of 5 per cent. So, when the debt is intended for investment/acquisition purposes, there are restrictions to the numbers in the BS. Investments and acquisitions take a long time in asset turn over, so the issuance of *ṣukūk* requires certain collaterals when they are used to finance such investments and acquisitions. The results of these studies prove that hypothesis H1c of this study is rejected. Previous research conducted on private debt has proven that loans for investment are suited to IS-based debt covenants (Paik *et al.*, 2019). Meanwhile, this study shows evidence that debt for investment purposes provides a restriction in terms of BS numbers and requires certain collaterals in the issuance of *ṣukūk*. The result is different because the object of this research is the form of *ṣukūk* that require an underlying asset in each *ṣukūk* issuance. *Ṣukūk* give holders the right to receive cash flow and an undivided proportion of ownership in the project or underlying assets (Ismal, 2019). *Ṣukūk* holders get a return from the results of project performance or assets that are funded based on a pre-agreed debt covenant (Alam *et al.*, 2018). The results of this study prove that it is very important to include collaterals in Islamic-based public debt covenants (*ṣukūk*). Therefore, the results of this research are dominated by collateral-based debt covenants. These results also prove that the purpose of debt affects the type of debt covenant chosen in each public debt issuance, especially in the form of *ṣukūk*. This model indicates the effect of the loan purpose on the overall

ṣukūk rating to be 49.6 per cent; the rest is influenced by other factors. Furthermore, the results of the binary logistic regression test are presented in **Table 6**.

Table 6: The Effect of *Ṣukūk* Rating on Debt Covenants

Variable	DC-IS	DC-BS	DC-BS	DC-Collateral
Ṣukūk rating-AA	.245***	.815	.245***	46.334***
Ṣukūk rating-AAA				210.971***
Maturity	1.915***	.782	1.915***	.770*
Deal size	1.245	.975	1.245	.591
Firm age	1.015**	1.191**	1.015**	1.012

Note: ***significant at 1%, **significant at 5%, *significant at 10%
Source: Authors' own

Table 6 shows that the *ṣukūk* rating affects all types of debt covenants except those based on BS. This means that the *ṣukūk* rating has an effect on debt covenants based on IS, both (IS and BS), and collateral. The biggest influence of the *ṣukūk* rating is on collateral-based debt covenant, especially in the AA-, AA and AA+ rating. This study finds that a *ṣukūk* with a AAA rating tends to choose a collateral-based debt covenant. These results indicate that collateral plays an important role in obtaining the highest *ṣukūk* rating, namely AAA. Meanwhile, the AA-, AA and AA+ *ṣukūk* ratings are more in line with the IS debt covenant and are based on collaterals. This result proves that the accounting numbers in IS, which indicate a company's financial performance, also play a role in obtaining an AA *ṣukūk* rating and in issuing the *ṣukūk* with a certain collateral. The control variables that affect the debt covenant are the period of debt and the firm age. This study has been unable to prove the outcome of *ṣukūk* size (deal size) on the debt covenant.

Data about the Beta coefficient (β) and Standard Error (SE) are used to answer the second hypothesis. The results obtained are presented in **Table 7**. After obtaining the values of β and SE from the first and second tests, as shown in **Table 7**, the Sobel online test was carried out to determine the indirect effect. The calculation was performed by entering a combination of the values of β and SE in the model, so that the Sobel test results are obtained as recorded in **Table 8**.

Table 7: Beta Coefficient and Standard Error

Variable	Beta Coefficient	Standard Error
Model A		
X1 → Z-AA	.478	.423
X2 → Z-AA	-.505	.472
X3 → Z-AA	-1.436	.362
X1 → Z-AAA	2.648	1.428
X2 → Z-AAA	19.145	.000
X3 → Z-AAA	-1.548	1.208
Model B		
Z-AA → Y1	-1.405	.380
Z-AA → Y2	-20.862	3081.900
Z-AA → Y3	-1.405	.380
Z-AA → Y4	3.836	.645
Z-AAA → Y4	5.352	1.387

Source: Authors' own

Table 8: Sobel Test Result

Descriptive	Statistic Test	Standard Error	P-Value
X1 → Z →Y1	-1.08067765	0.62145266	0.27984053
X1 → Z → Y2	-0.00676908	1473.17463092	0.9945991
X1 → Z → Y3	-1.08067765	0.62145266	0.27984053
X1 → Z-AA →Y4	1.11016152	1.65165877	0.26692943
X1 → Z-AAA → Y4	1.08447658	2.35897765	0.27815355
X2 → Z → Y1	1.02775024	0.69036715	0.30406733
X2 → Z → Y2	0.00676907	1556.39064954	0.9945991
X2 → Z → Y3	1.02775024	0.69036715	0.30406733
X2 → Z-AA → Y4	-1.05301116	1.83965762	0.29233588
X2 → Z-AAA → Y4	-1.03101624	2.6214524	0.3025332
X3 → Z-AA → Y1	2.70468929	0.7459563	0.00683683***
X3 → Z → Y2	0.00676919	4425.61484356	0.99459901
X3 → Z-AA → Y3	2.70468929	0.7459563	0.00683683***
X3 → Z-AA → Y4	-3.30010891	1.66918612	0.00096647***
X3 → Z-AAA → Y4	-2.76595296	2.77859823	0.00567567***

Note: ***significant at 1%, **significant at 5%, *significant at 10%
Source: Sobel test output from http://quantpsy.org/sobel/sobel.htm

Based on the research model conducted to test the second hypothesis (H2), there is an intervening variable, namely the *ṣukūk* rating. Many models must be tested for their indirect effect, which is then calculated using the Sobel test that is carried out online. The data in **Table 8** show the results for the test of the indirect effect of the loan purpose on the debt covenant through the *ṣukūk* rating, some of which have proven that there is a mediating effect among them. The mediation effect can be seen in the purpose of debt used for investment or acquisition for all types of debt covenants other than those based on BS. So, the *ṣukūk* rating is proven to be capable of being a mediator for intervening in the influence of loan purpose for investment or acquisition for debt covenants based on IS, BS, and collateral. Meanwhile, a mediation effect did not appear for other loan purposes (operational and financial). AAA and AA-, AA, and AA + ratings, in particular, can be a mediating variable in the relationship between the loan purpose and public debt covenant in the form of *ṣukūk*. So, it can be concluded that the results of this study accept the second hypothesis that has been proposed, not for all loan purposes, but only for debt for investment purposes. Bond ratings are an important indicator of a company's credit quality (Andrew & Baker, 2020). Siddiqi (2006) examined the determinants of the source of corporate debt and found that public debt contracts proved more suitable for good quality companies, while low quality companies preferred to borrow from banks. It is proven in this study that high ratings (AA and AAA) can mediate the effect of loan purpose on debt covenants in the form of *ṣukūk*.

DISCUSSION

This research provides empirical evidence of the importance of understanding debt covenants in *ṣukūk* issuances. The existence of a debt covenant can reduce monitoring costs because stockholders are also assisted by bondholders in supervising managers as agents (Jensen & Meckling, 1976). In determining the debt covenant, many things must be considered, including the loan purpose. According to Watts and Zimmerman (1978), the debt covenant hypothesis is

related to the conditions that a company must fulfill in a debt covenant. Certain purposes will suit a particular type of debt covenant either in terms of providing limits in accounting figures or requiring certain collaterals. In Indonesia, bondholders are represented by a trustee in determining debt covenants, including those in the form of *ṣukūk*. Restriction of accounting numbers in the IS, BS, or the existence of certain collaterals in the issuance of *ṣukūk*, can reduce the risk of the company defaulting and even underperforming, which would be detrimental to stockholders and *ṣukūk* holders. Debt agreements can implicitly provide an estimate of the borrowing company's financial conditions in the future. Breaches of debt covenants lead to imposition of higher interest rates (Dichev & Skinner, 2002). When covenant breaches are frequent, they can act as a useful signal that a loan adjustment is required. Similarly, Chava and Roberts (2008) and Dyreng (2009) also found a significant decrease in capital investment of the company due to changes in interest differences and credit lines following a breach of the debt covenant. Another possibility that the company can face is the loss of opportunity to get accelerated payments and debt restructuring (Alexander *et al.*, 2017; Elnaby *et al.*, 2017). One efficient way to share interests between shareholders and creditors is through debt financing. Therefore, debt covenants are needed to maintain accounting numbers that can reflect the financial conditions of the borrowing company (Aghion & Bolton, 1992). If the company breaks its covenant, control will shift to creditors.

This study finds that there was a positive influence between the loan purpose and the *ṣukūk* rating. This study also provides empirical evidence of the *ṣukūk* rating's ability to mediate the effect of loan purposes on debt covenants. However, *ṣukūk* ratings can only mediate loan purpose investments with debt covenants of the IS, both (IS and BS), and collateral types. Meanwhile, the effect of loan purpose, other than for an investment with a BS-type debt covenant, is not mediated by the *ṣukūk* rating. Debt for investment/acquisition provides the highest risk, with the longest term; therefore, a *ṣukūk* rating is needed to be able to mediate its effect on the type of debt covenant. Previous research provides evidence on the effect of bond ratings on the type of debt covenants (Demerjian & Owens, 2016; Alexander *et al.*, 2017; Carrizosa & Ryan, 2017; Levy & Shalev, 2017; Yang, 2017). Chiang *et al.* (2017) found that companies with a good quality offering influence the formation of covenants. Some studies did not support the results of this current study. Frankel *et al.* (2008), Frankel and Litov (2007) and Alcock *et al.* (2019) all found negative effects. Some other studies conducted by Siddiqi (2006), Billett *et al.* (2007) and Inamura (2009) also did not find any influence between the quality of bonds (bond rating) and the making of covenants. However, this study supports other research conducted by Beatty *et al.* (2002), Asquith *et al*. (2005), Bharath *et al.* (2008), and Sulistiani (2018), which also found a positive influence between credit ratings and debt covenants. Meanwhile, other research such as Skousen *et al.* (2018) has proven that there is a positive effect of loan purpose on bond ratings. The results of this study as well as previous research prove the relevance of the *ṣukūk* rating for both companies and investors.

CONCLUSION

This study aims to determine the effect of loan purpose on debt covenants, as well as the ability of the *ṣukūk* rating to mediate the relationship between them. The results of this research prove that *ṣukūk* involve the most complex debt covenants because they have to consider the IS and BS figures and, especially, the need for certain collaterals in their issuance. *Ṣukūk* that are used for financial purposes look more closely at the numbers in the BS in determining the debt contract.

Meanwhile, *ṣukūk* issued for investment and acquisition purposes prefer to restrict the BS figures and stipulate certain asset collaterals in their issuance. Meanwhile, the *ṣukūk* rating has proven to be able to mediate the relationship between loan purposes and debt covenants, especially for debt aimed at investment/ acquisition. The results of this study provide new empirical evidence regarding the relationship between loan purposes and debt covenants, especially for debts issued in the form of *ṣukūk*.

This study can provide guidelines for trustees, as representatives of *ṣukūk* holders, to determine debt covenants based on different loan purposes. Knowledge of debt covenants is needed so that there is no mistake in drafting them. This study also provides additional literature, especially regarding debt covenant hypotheses, that debt covenants are necessary and require different restrictions for different purposes. A limitation of the current study lies in the fact that the sample of this study is limited to Indonesian companies listed on the IDX. In addition, the data were taken from various sources, namely: IBMD, prospectuses, and annual reports because data regarding loan purposes and debt covenants are sometimes unavailable in the prospectus. So, relevant data should be sought in the company's annual report at the time *ṣukūk* are issued. Future studies could involve a wider sample by comparing *ṣukūk* from various countries. Moreover, different variable measurements might be a good option for future research.

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