

# Analysis of Factors Affecting the Availability of State Sukuk as a Source of National Finance

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Investment in state retail Sukuk is attractive because of several advantages, among others due to the security of investment. This research aims at determining the effect of assets, sharia compliance risk, legal and regulatory risk, current benefits and various prices on the availability of Sukuk State. This research was conducted by taking trading samples of Sukuk State Ijarah and Sukuk State Wakalah on the Indonesia Stock Exchange, using a quantitative approach. The research findings are that Sharia compliance risks, legal and regulatory risks, and diverse prices affect the availability of State Sukuk, while current assets and benefits do not affect the availability of state Sukuk. Furthermore, the research suggestions for stakeholders are that the trade Sukuk State Ijarah and Sukuk State Wakalah on the Indonesia Stock Exchange can have positive returns to the State Sukuk issuers and investors. State Sukuk is a national source of funding for infrastructure financing as well as financing the budget deficit of the Government of the Republic of Indonesia.

**Key words:** *Assets, sharia compliance, laws and regulations, current benefits, diverse prices, state Sukuk.* 

#### Introduction

The largest placement is in capital market instruments, namely Islamic Stocks with a portion of 41.23%, government Sukuk 13.95%, sharia mutual funds 10.05%, corporate Sukuk of 5.66%, and instruments deposits amounting to 28.57%. The aim of all parties is that the sharia bond system, both for the suppliers and buyers, can be realized. As with various legal investment choices, Indonesian's interest in investing in Sukuk was quite high determined



from a series of Sukuk which previously issued SR 08, attaining the highest investor record of 48,444 investors and raising funds of around Rp. 14. 5 trillion.

Investment in state retail Sukuk was attractive because of several advantages, among others due to the security of investment. According to Rodoni & Setiawan (2016) the comparison of the yield to maturity of different bonds is used by investors to decide which bonds to buy or sell. Regarding risk evaluation, several methods are used by corporations and institutions; one is the duration model method, used in risk management to calculate duration and net income by using all the cash inflows based on yield to maturity. The difference between Sukuk and bonds highlights the fact that bonds are considered as long term debt instruments that are issued by corporations and government, while Sukuk are certificates of equal value that represent an ownership proportion of an issued asset. Several researchers conclude that conventional bonds and Sukuk instruments are indeed different. Whether assets (valuation factors) affect the availability of state Sukuk, whether the risk of sharia compliance (risk factors) influences the availability of state Sukuk, whether current benefits (factors for issuing Sukuk) affect the availability of the State Sukuk and whether the price varies (the way the Sukuk is issued) affects the availability of the State Sukuk.

According to Ghauri (2012), the following are the highlighted challenges in Sukuk market: a) very limited institutions available to manage Sukuk funds, b) Sukuk issuance charges are very high compared to conventional bonds, c) Sukuk returns are lower compared with costs involved. d) currently, various Sukuk provide fixed return, or guarantee the return which is in violation of Islamic jurisprudence, e) tenders are fixed from 3 months to 10 years, f) ownership of assets should be conducted and transferred rather than simply trading paper, g) sharia compliance should be conducted on an ongoing basis, h) generally Sukuk lack of conventional asset management practices restrict it as substitution for conventional bonds. According to Alswaidan et.al (2017) a number of schemes for the classification of Sukuk risks exist based on extending and adapting the risk classification schemes used in conventional finance.

Given the short data time series currently available to researchers in Islamic finance, empirical tests of expected returns models cannot yet be conducted to the same degree of rigor as in conventional finance. Meanwhile Uppal & Mangla (2017) found that the total value of internationally placed Sukuk is about \$50 billion as per this research sample of all 92 Sukuk issues for which information was available as of August 2014 on the Data Stream International database. European regulators have started to provide legal recognition to Sukuk issues, and a number of entities, sovereign, financial and corporate have started to issue Sukuk to source funds from the Muslim countries for their funding requirements The United Kingdom became the first Muslim country to issue a 200 million Sukuk in 2014, which was



11.5 times oversubscribed and was competitively priced with the UK government bonds. Saad & Ali (2019).

Apart from the fundamental shariah concepts that underlie the different structures of Sukuk, the execution of the contracts is patterned after conventional bonds. This feature does not exist in conventional bonds as it is based on debt financing and therefore, the Sukuk has a different underlying structure and provision compared to conventional bonds since it follows shariah principles, Sukuk a relatively new asset class in global capital market, is facing a new challenge in the form of Sukuk defaults like conventional bonds rather than structural problems or compliance with shariah law Therefore, an analysis of debt yield spreads as a measure of default risk is an important issue in investment since this is one, if not the only, key factor in determining the cost of external financing borne by the issuer of debt securities bonds and Sukuk yields are different despite having a similar tenure in Malaysia.

Hasan & Parveen (2019) state that most prospective Sukuk issuers are able to achieve favorable pricing in the Sukuk market as compared to an equivalent issue in the conventional bond market Interest which is a common feature in conventional finance if the borrower fails to repay in time Also, conventional bonds are contractual obligations whereby the bond issuers are obliged to pay bondholders, on a given date, both principal and interest. Ariff & Zarei (2017) investors earn on sharia-compliant Sukuk Treasury securities compared to yields on identical conventional securities traded in the same bond market. One aspect of the exchange rate risk is that the equity price is related to the exchange rate and market, which affects the stakeholders in the project and can be overcome the theoretical risks of Sukuk. It is also a good idea for the Sukuk investors to make themselves aware of the relevant risks involved in Sukuk transactions so a better decision can be made.

Most prospective Sukuk issuers are able to achieve favorable pricing in the Sukuk market as compared to an equivalent issue in the conventional bond market. Interest is a common feature in conventional finance, and if the borrower fails to repay on time, the interest accrued is added to the principle (Radzi & Lewis, 2015). In February 2008, AAOIFI announced that in its view the majority of Sukuk in the market at that time did not comply with the precepts of Shariah. In Malaysia, however, purchase undertakings are approved by the Shariah Advisory Council, Malaysia. Given the force of Usmani's arguments, and the impact it has had elsewhere in the Islamic world, the Malaysian position might seem to some observers to be, at best, questionable, and indicative perhaps of a different balancing of commercial interest religious principles (Kartiwi et.al, 2018). Valuable Sukuk rating prediction for investment market speed of use reduced financial and economics guarantee status to give a better picture about Sukuk credit risk profile.



#### Literature Review

A sustained difference in the yields of identical conventional instruments and the new shariacompliant Sukuk securities would challenge some of the market practices and rating procedures in this new market (Haque et.al, 2017). In the case of bonds, the bond certificate may be backed by assets that are not compliant with Shariah, which may be bundled together with other types of assets without the consumer's knowledge The consumer of Sukuk is assured that the value of the certificate corresponds to assets that are in the public good and not related to activities or products that are contrary to Islam.

The specific structure of Sukuk alleviates some major bond constraints for a firm: the results are contingent and the underlying assets are separated from those of the issuers. According to Klein & Weill (2016) investors that tap on Sukuk market are expected to be riskier and less profitable than those who choose bond market, and this research seeks to investigate the determinants of the choice of a Sukuk over a conventional bond.

From the point of view of demand, the entry of a new asset class on the market is an undeniable asset for diversification for both Muslim and non-Muslim investors as the integration of Sukuk into such a portfolio could reduce overall portfolio risk This demand is also favoured by a strong emotional burden on Muslim investors who spontaneously prefer investments in accordance with the sharia, According to Amrani & Hamza (2017) type of Sukuk is equivalent to zero-coupon bonds insofar as the Sukuk contributors do not receive periodic coupon payments on the investment certificates, they hold only the repayment of the nominal value plus a premium which they can receive at maturity.

According to Radzi & Lewis' (2015) definition, there must be a tangible asset and although some *fuqaha* allows for a portion of the asset to be in an intangible form, all jurists require that there be an underlying asset This is an important differentiating feature of Islamic finance and one that can be considered a source strength since the requirement for an underlying asset precludes the possibility of excessive leverage.

Based on the literature review of previous research, the following research hypotheses were made:

H1: Assets affect availability of state Sukuk

In terms of the availability of state Sukuk, if it is associated with study theory, investment value was not only influenced by internal factors of bond issuers but also influenced by external factors, namely interest rates. Investment decisions had a significant effect on firm value, dividend policy had a significant effect on firm value but interest rates had no



significant effect on the value of the company. Ghani (2017) added that Sukuk ownership according to sharia was an exclusive relationship that gave the right to the owner to enjoy and use the value of the asset. The recovery of the transaction when the issuer experiences a crisis or post-crisis period in the event of a crisis, showed similar results where the asset value had no effect significantly.

The Sukuk issuers in this case stated the availability of state Sukuk and in this case, the State sought to increase the availability of state Sukuk to increase their profitability and growth so that they were chosen more for investors as for the state with Sukuk one of the sources of funding for development. The results of testing the hypothesis showed that there was no positive and significant influence of asset value on the availability of state Sukuk which is consistent with the findings of Kim et.al. (2008) who observed in a non-financial study, the tendency of issuers to issue bonds, while investor interest was based on the capacity growth of issuers at large and small growth rates. Meanwhile Radzi & Lewis (2015) found that the presence of an asset gives the Sukuk the "form" of an Islamically permissible finance product, but not the "substance". Obviously, although the Sukuk transaction is based on a pool of reference assets, the arrangement is only to facilitate the transaction and does not give investors legal rights to the assets.

According to Hossain & Kabir (2018), efforts to compare Sukuk with conventional financial instruments were mainly bond based on their composite indices, and the majority tend to equate a Sukuk with bond on the ground of equivalent yields from both financial assets. The scholarly reviews generally identify the Sukuk as an Islamic bond providing a buyer-seller, lessor-lessee, fund provider-user or partnership-based relationship. However, it is of note that the Sukuk contract does not constitute a lending-borrowing relationship between the holder and issuer of Sukuk. Also, some scholarly studies debated the comparability between Sukuk and bond, because a Sukuk also carries the features of equity.

According to Radzi & Lewis (2015), investors now need to be sure about the purchase of a Sukuk investment and enquire both into what type of Sukuk structure they hold, and what type of asset ownership structure they have. The ownership of Sukuk in the sharia context is an exclusive relationship that gives the owner the right to enjoy and use the value of these assets to recover transactions when the issuer experiences a crisis or post-crisis period which shows that the value of the assets of the investor and the issuer has no effect on the availability of state Sukuk. Based on this research, the ownership of assets of both parties is not a determining factor of asset ownership. From issuers, it can be understood that the growth of state Sukuk is one of the sources of state funding for development implementation, while investor interest depends on the number of sharia bonds issuance based on the country's development growth taking into account the ability of investors. In this case, the ownership of



investor and issuer assets is not a determining factor for Sukuk ownership, but state funding for development implementation.

H<sub>2</sub>: Sharia compliance risk affects the availability of state Sukuk

Sukuk was associated with theoretical research that viewed society specifically from sharia economic factors. The results of testing the hypothesis of Islamic compliance risk had a significant positive influence on the availability of state Sukuk according to Akram et al. (2011) who emphasized that the structure of Islamic finance was based on a profit-sharing partnership scheme and risk-sharing was a component of trade transactions that could transact the norms of business investment behaviour. Risk-sharing could be understood as a correlation between capital and labour in Islamic financial instruments. In reality, this can be considered the best method to enforce justice between work effort and yield, and between investment and investment rewards. Investors could be seen as aggressive and participatory through Islamic financing methods as reflected in the theory of profit and loss in Islamic financial instruments, capital and labour combined to establish partnerships between issuers and investors.

According to Balcilar & Demirer (2016) risk sharing is the most important thing in Islamic financial risk management. The risk transmissions from global debt and equity markets as well as Islamic equities to the market for Islamic bonds and the fact that Islamic bonds are not immune from shock and volatility spill overs from global conventional markets, can indeed serve as better diversifiers for conventional stock portfolios compared to conventional bonds. The research found similar results where the risk of sharia compliance had a significant influence on the availability of state Sukuk, an investment decision for the Sukuk state issuer, in this case the Indonesian government, is the decision.

The results of testing hypotheses were consistent with the study of Junaid and Azhar (2010) in Islamic Instruments, capital costs and labour costs combined to establish partnerships. Risk sharing was an important part of the risk management framework in Islamic finance. The distribution of risk is the most important in the management of Islamic financial risk based on these studies showing similar results that the risk of Islamic compliance affects the availability of state Sukuk, in this case, an investment decision. Establishing an investment partnership is considered as the correlation between Islamic financial instruments in upholding justice, employment efforts and a plan for return on investment which refers to investment capital and return on investment.

H<sub>3</sub>: Legal and regulatory risk affects the availability of state Sukuk



The Sukuk classification scheme was different from conventional investment structures because the Sukuk regulation structure classification minimized the risk of Sukuk, proven by multifactor regression based on conventional equity and bond analysis. According to Saad & Ali (2016), default risk among conventional bonds and Sukuk issuer can be mitigated by looking at the impact of gross domestic product level to ensure firm sustainability in the future. Muslim Sukuk holders should take into consideration when investing in bonds to find halal status for their here and afterlife since yields represent cost to the issuers but return of investment to them.

Nasir & Farooq (2017) stated that most Sukuk securities were lacking in helping to diversify legal and regulatory risks. The use of clear contracts and regulations required the right basis and legal basis so that the investor position became clear, which showed similar results where legal and regulatory risks had a significant influence on the availability of state Sukuk that could be developed as a source of funding for the development of infrastructure to serve the public used as underlying assets. The results of hypothesis testing had a significant positive influence on the availability of state Sukuk in line with the previous study examined by Bakar & Handayani (2015). Legal and regulatory certainty that was protected by regulation by paying attention to the amount of investment and the guarantees provided by the Sukuk issuer were clearly managed so that they were free from default conditions which result in investment losses.

Interest payments and defaults can be grouped into three types of credit events: a missed or delayed disbursement; bankruptcy or legal blocks of interest and/or principal; and a distressed exchange for the issuers amounting to a diminished financial obligation or helping the borrower avoid default. According to Radzi & Shararuddin (2018), Sukuk is designed to share risk, investors would have had to share losses with issuers, to evaluate the practice of partnership-based or equity-based Sukuk in light of the default, by examining two defaults of *musharakah* Sukuk before and after the Accounting and Auditing Organization for Islamic Financial Institutions announcement in 2008. The use of clear contracts and regulations is the proper legal basis for the position of investors and Sukuk issuers to be clear. Based on these studies showing that legal and regulatory risk has a more concrete effect on ownership of Sukuk, the availability of state Sukuk can be developed as a source of State funding, infrastructure development as a service tool for public underlying assets.

H4: Current benefits affect the availability of state Sukuk

Associated with the theoretical review of the benefits obtained through the portfolio from the issuer, then the investment decision in avoiding risk through the Sukuk issuance method of the previous study, Mubarok, A., & Afiyah. (2015) stated that Sukuk publishing companies informed the superiority of Sukuk issued, in the form of the ability of companies to fulfil



obligations or rewards to investors along with their weaknesses and risks arising from the Sukuk issued.

Smaoui et.al. (2017), comprehensively studied Sukuk benefit effects on a country's financial development of Sukuk issuance, including the impact of the banking system, the bond market, and the stock market. Investors were found to consider the practice of income distribution more in making investment decisions and information on income distribution can influence the calculation of financial ratios that affect the assessment of transaction risk. In the Sukuk state, occurrence of default risk was a very small possibility, and security of investment was more rational investor thinking. Meanwhile Muhmad & Muhmad (2018) found that shariah standard for all participating countries, could contribute to the Sukuk development in the competitive market, the enforcement concept of sustainable development that has been spread around the world.

Whereas for the state Sukuk issuers, the Indonesian Government was more concerned in the practice of income distribution. Information on investment returns can affect financial ratios and investment security reviews, while issuers pay more attention to the practice of income equity based on these studies and the results show that current benefits do not affect the amount of interest in State Sukuk investment. Its relationship with the availability of state Sukuk as perceived by investors and issuers prioritizes the presentation of Sukuk reports in accordance with the actual conditions as an investment security protection.

H<sub>5</sub>: Various prices affect availability of state Sukuk

Various prices had a significant positive influence on the availability of state Sukuk. As linked to previous theoretical studies, diverse prices were philosophical approaches that were closely related to the capitalist and socialist systems that influenced a lot of conventional and sharia economic activities. Results where asset values did not significantly influence the availability of Sukuk on the condition of the Indonesian economy, could be used by the government as a reference for making policies in regulating the price of sharia bonds and generate public interested in investing in Sukuk provided by the government. Investors still held bonds until maturity when the bondholders got rewards or results from sharia investments via the matured contract but in another opportunity as the bond holder could sell back the bonds on the secondary market with the aim of capital gain. The results of testing the research hypotheses found that various prices had a significant positive influence on the availability of Sukuk.

Zulkhibri (2015) found price Sukuk in the market has flourished, but Islamic financial markets are having difficulty in fully developing in many emerging Muslim countries because Islamic finance is still limited concerning interest rate swaps and other conventional



derivative instruments. Meanwhile, Widayati (2009) stated that even though the rising prices of conventional bonds and Islamic bonds increased, the number of investors continued to rise as State Retail Bonds and Sharia Bonds issued or availability of bonds. The government provided a good influence on the capital market, especially market player investment. A philosophical approach that is closely related to the capitalist and socialist systems influences more conventional and sharia economic activities, publishing investment price information describing the country's economic conditions, people's ability to buy investments or Islamic bonds, public outreach and interest in investing in Sukuk issued by the government. Previous research found investors keep bonds until maturity when the bondholders gain rewards but on other occasions, Sukuk holders can resell Sukuk and distributor banks in the hope of getting a profit.

## Methodology

The sample in this study was based on non-probability (selection of non-random) traded listing documents (Retail Sukuk, Islamic Fixed Rated State-Sharia Treasury) during the year 2012-2016 from January to December. The following was a sample of state Sukuk based on the criteria for selecting 60 (sixty) samples.

For the factors that influenced the availability of state Sukuk, the analysis was performed by using the Ordinary Least Square (OLS) method to estimate the parameters. This approach did not pay attention to individual dimensions or time so that the data Behaviour could be assumed to be the same in various time periods as the dependent variable in this study availability of state Sukuk, while the independent variables were asset value, risk of Sukuk investment in the country, regulation of state Sukuk issuance, current benefits and varying prices. Basically the common effect model was the same as OLS by minimizing the sum of squares. The form for the Ordinary Least Square (OLS) model was:

*Y*it=*b*o+*b*1Xit+b2Xit+εit fori=1,2...,n and t=1,2.....t



#### **Results & Discussion**

 Table 1: Results of Study Model Testing

 $AS = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon_1..$  $AS = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_2 * X_5 + \beta_7 X_3 * X_5 + \varepsilon_2...$ 

	Prediksi	Main Model		Study Model	
		Koefisien	Tstatistik	Koefisien	Tstatistik
Constant		-268765	-2,198**	-401789	-2,818***
XI	(+)	-0,7702	-1,009	-0,797	-0,675
X2	(+)	273347	5,865***	406994	4,852***
X3	(+)	281005	5,1214***	410534	6,166***
<i>X4</i>	(+)	2,4374	1,641	2,212	1,631
X5	(+)	0,1802	3,758***	3,081	4,008***
X2*X5				-2,893	-3,772***
X3*X5				-2,887	-3,778***
Adjusted $R^2$		93,85%		94,99%	
Fstat		181,22***		160,99***	

Source: Data processed, 2018

*The goodness of fit* model finds this a very good model because it had adjusted R-square of 93.85%, meaning that the availability of state Sukukwas influenced by asset value variables, sharia compliance risk, legal risk, current benefits and varying prices of 93.85% remaining 6.15% influenced by other variables outside the study model. The regression model in this study was modified by entering the interaction variables between the Sharia Compliance risk dummy variable (X2) and legal risk (X3) with the other three independent assets values (X1), current benefits (X2) and diverse prices (X5).

The inclusion of the interaction variable in the hypothesis test equation through the selection process in the initial equation, contained all the interaction variables. Interaction variables that have a *probability value* of less than 5% were included in the hypothesis test equation, while interaction variables whose probability value was more than 5% were not included in the hypothesis test equation.

Time series data in this study was one entity data with time/ monthly or annual dimensions and based on this study model, the highest regression coefficient was legal and regulatory risk, indicatinging that legal and regulatory risks have the most influence on the availability of state Sukuk, while the smallest regression coefficient was on the verifiable asset value on the availability of state Sukuk.



## Conclusion

State Sukuk as a source of National financing and the risk of sharia compliance (risk factors) affected the availability of State Sukuk, so it could be concluded that the more compliant the Shariah issuance of the State Sukuk, the greater the effect on purchase interest in the State Sukuk. Thus, it is necessary to increase the availability of State Sukuk to address investor needs for State Sukuk as National financing, Legal and regulatory risks (risk factors) affect the availability of the State Sukuk. It can be concluded that the more compliant the laws and regulations of the issuers of State Sukuk, the greater the effect on the interest in buying State Sukuk by investors. Thus, it is a finding of this research that it is necessary to increase the amount of availability of State Sukuk to address investor needs for State Sukuk as a source of National financing.



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