


HOW DOES SUKUK INVESTMENT PERFORM? A LITERATURE REVIEW

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ARTICLE INFO	<u>ABSTRACT</u>
<p>Article history:</p> <p>Received 14 April 2023</p> <p>Accepted 13 July 2023</p>	<p>Purpose: The aim of this study is to systematically analyze and map the literature on the performance of sukuk using a database obtained from Scopus.</p>
<p>Keywords:</p> <p>Investment; Sukuk; Sukuk Performance; Systematic Review; Islamic Finance; Scopus.</p> <div data-bbox="172 981 480 1227" style="text-align: center;">  </div>	<p>Design/Methodology/Approach: The study used a method adopted from the PRISMA system where as many as 478 journals were selected to become fifteen full-text journals which were then analyzed and classified according to their findings. This literature study applies the inclusion criteria of article selection, including sukuk studies that make performance the main study.</p> <p>Findings: The results of the study are presented in descriptive and thematic qualitative synthesis. The descriptive findings section explains that sukuk performance studies have experienced a growth in the number of studies until 2022. The study also describes the most cited articles in the sukuk performance area. In addition, this study also explains the findings in the form of Word Cloud and TreeMap analysis to summarize the main themes in the sukuk study. The study found and documented the variables the researchers used to measure sukuk investment performance. The study also classifies the existing literature regarding developing and evaluating Sukuk's performance.</p> <p>Research, practical & social implications: The study presented the results of research developments regarding the performance of sukuk so that researchers can determine the extent of research progress and opportunities for further research. In addition, this research also contributes to providing information to investors by displaying the results of evaluations and developments in the performance of sukuk to make it easier for investors to measure the risk of investing in sukuk.</p> <p>Originality/Value: The value of the study is the first literature study to focus on the performance of sukuk as an instrument of Islamic finance.</p> <p>Doi: https://doi.org/10.26668/businessreview/2023.v8i7.2580</p>

COMO O INVESTIMENTO EM SUKUK SE COMPORTA? UMA REVISÃO DE LITERATURA

RESUMO

Objetivo: O objetivo deste estudo é analisar e mapear sistematicamente a literatura sobre o desempenho do sukuk usando uma base de dados obtida da Scopus.

Design/Methodologia/Abordagem: O estudo utilizou um método adotado do sistema PRISMA, onde até 478 periódicos foram selecionados para se tornarem quinze periódicos de texto completo, que foram então analisados e classificados de acordo com seus achados. Este estudo de literatura aplica os critérios de inclusão da seleção de artigos, incluindo estudos de sukuk que fazem do desempenho o estudo principal.

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Constatações: Os resultados do estudo são apresentados em síntese qualitativa descritiva e temática. A seção de achados descritivos explica que estudos de desempenho em sukuk experimentaram um crescimento no número de estudos até 2022. O estudo também descreve os artigos mais citados na área de performance de sukuk. Além disso, este estudo também explica os achados na forma de análise Word Cloud e TreeMap para resumir os principais temas do estudo de sukuk. O estudo encontrou e documentou as variáveis que os pesquisadores usaram para medir o desempenho do investimento sukuk. O estudo também classifica a literatura existente sobre o desenvolvimento e avaliação do desempenho de Sukuk.

Pesquisa, implicações práticas & sociais: O estudo apresentou os resultados dos desenvolvimentos de pesquisa sobre o desempenho de sukuk para que os pesquisadores possam determinar a extensão do progresso da pesquisa e as oportunidades para uma pesquisa adicional. Além disso, esta pesquisa também contribui para fornecer informações aos investidores, exibindo os resultados de avaliações e desenvolvimentos no desempenho do sukuk para facilitar para os investidores a mensuração do risco de investir em sukuk.

Originalidade/Valor: O valor do estudo é o primeiro estudo de literatura a se concentrar no desempenho de sukuk como um instrumento de finanças islâmicas.

Palavras-chave: Investimento, Sukuk, Desempenho de Sukuk, Revisão Sistemática, Finanças Islâmicas, Escovo.

¿CÓMO SE DESEMPEÑA SUKUK INVESTMENT? UNA REVISIÓN DE LA LITERATURA

RESUMEN

Abrazo: El objetivo de este estudio es analizar y mapear sistemáticamente la literatura sobre el desempeño del sukuk utilizando una base de datos obtenida de Scopus.

Diseño/Metodología/Enfoque: El estudio utilizó un método adoptado del sistema PRISMA donde se seleccionaron hasta 478 revistas para convertirse en quince revistas de texto completo que luego fueron analizadas y clasificadas según sus hallazgos. Este estudio aplica los criterios de inclusión de la selección de artículos, incluyendo estudios sukuk que hacen del rendimiento el estudio principal.

Hallazgos: Los resultados del estudio se presentan en síntesis cualitativa descriptiva y temática. La sección de hallazgos descriptivos explica que los estudios de rendimiento de sukuk han experimentado un crecimiento en el número de estudios hasta 2022. El estudio también describe los artículos más citados en el área de performance sukuk. Además, este estudio también explica los hallazgos en forma de análisis de Word Cloud y TreeMap para resumir los principales temas del estudio sukuk. El estudio encontró y documentó las variables que los investigadores utilizaron para medir el desempeño de la inversión en sukuk. El estudio también clasifica la literatura existente con respecto al desarrollo y evaluación del desempeño de Sukuk.

Investigación, implicaciones prácticas y sociales: El estudio presentó los resultados de los desarrollos de investigación con respecto al rendimiento del sukuk para que los investigadores puedan determinar el grado de progreso de la investigación y las oportunidades para una mayor investigación. Además, esta investigación también contribuye a proporcionar información a los inversores al mostrar los resultados de las evaluaciones y la evolución de los resultados del sukuk para facilitar a los inversores la medición del riesgo de invertir en sukuk.

Originalidad/Valor: El valor del estudio es el primer estudio de literatura que se centra en el rendimiento del sukuk como instrumento de las finanzas islámicas.

Palabras clave: Inversión, Sukuk, Rendimiento de Sukuk, Revisión Sistemática, Finanzas Islámicas, Scopus.

INTRODUCTION

As for one form of capital market instruments, namely Islamic bonds or commonly referred to as sukuk, sukuk is present as a breakthrough in Islamic finance in the form of funding and investment (Nasrifah, 2019; Ridwan & Barokah, 2023). Sukuk is a long-term security issued by issuers to pay income to sukuk holders through margin, profit sharing, or fees by paying back the sukuk funds at maturity, which is carried out based on sharia principles (Harun, 2017). Sukuk or Islamic bonds are needed in countries with an Islamic majority population,

such as Indonesia, Malaysia, and Middle Eastern countries (Santoso et al., 2022). Despite the prevalence of Sharia-compliant investing opportunities, many Moslems continue to favor traditional financial instruments (Wardani & Basri, 2020).

Sukuk has developed into a global asset supported by the participation of various issuers and investors from various parts of the world (Muhamed et al., 2022; Utami & Irawati, 2021). Sukuk can be one of the alternatives to investing under Islamic sharia (L. Abubakar & Handayani, 2017). Currently, sukuk can develop and contribute positively to economic growth in several countries in terms of finance and banking systems in the long term (Yıldırım et al., 2020). This Sukuk's development is inseparable from its performance or performance of the sukuk itself. In other words, the higher the performance of a company will bring a positive response from the community, which in the end can bring an excellent reputation to the company. The better the performance of sukuk, the higher the confidence of investors to invest through sukuk (Riani et al., 2022). Investors, researchers, and fund managers are interested in performance evaluation to assist decisions and maximize returns (Sawant et al., 2023).

Research on sukuk performance has been an essential part of the study by researchers (Paltrinieri et al., 2019; Rahman, Isa, Tu, et al., 2020). However, there has yet to be a specific literature review that discusses studies that discuss sukuk performance. The performance of investment portfolios such as sukuk is the most observed by investors, investment managers, and academic researchers. In this study, a literature review of the database from Scopus was carried out, which was related to sukuk performance. This research is fundamental because it aims to know how sukuk performance studies are conducted and developed by presenting a detailed systematic analysis to provide precise results from published articles. This research will provide an overview of opportunities that strengthen sukuk performance studies.

LITERATURE REVIEW

Several literature reviews about sukuk have begun to be written by researchers. The literature study on sukuk begins with a conceptual study of the Islamic investment product. Mostapha (2017) discusses sukuk, a financial instrument and an alternative to investing that can rely on both the government and companies that want to run their business while still being based on sharia principles. Uluylol (2021) examines past research to provide some overview of sukuk in the future by reviewing five different aspects of sukuk that are presented systematically. The five areas are (1) the structural difference between conventional and Islamic bonds; (2) empirical sukuk research; (3) issuance options between conventional and Islamic

bonds; (4) the law of sukuk and sharia; (5) systematic presentation in the issuance of sukuk prices. Most of the research is only carried out in empirical studies, but it needs to be addressed regarding the fundamental research on sukuk. In the end, it explains the recommendations and descriptions for future research.

Several other researchers began to study literature related to the development and challenges of the sukuk investment instrument. Abdulkareem & Sadad (2020) explained the sukuk ijarah and discussed the opportunities for sukuk ijarah for the country's economic development. (Abdulkareem & Sadad, 2020) also covered difficulties with adopting Islamic financing, particularly concerning the Federal Government of Nigeria's (FGN) sukuk and alternative conventional bonds. The findings of this study indicate that sukuk ijarah can be a substitute for accelerating economic growth and serve a valuable purpose in luring the government's and investors' attention to sukuk. Morni (2020) reviews thematically from the topics discussed and divides them into an overview containing the structure of sukuk, the nature of sukuk contracts, and theories taken from sukuk research. Then the rest is separated based on the research that compares sukuk and bonds, investors' views regarding sukuk, and the influence of sukuk on economic growth. In addition to discussing the main issues, this Morni (2020) also discussed trends and sukuk research issues that seek to provide insight into the shortcomings of this research and suggestions for future research sustainability.

Ma'ruf (2021) identifies the opportunities, challenges, and factors that hinder its development using the Pareto analysis principle. The results of this study show that the understanding of issuers and investors still needs to be improved in understanding Sukuk. Besides, incentives for Sukuk are also low, and Sukuk's liquidity problems are lower than conventional bond instruments. Ma'ruf (2021) complemented his study with the solution of the low development of sukuk instruments, namely the need for incentive policies and regulations, which can encourage companies to choose Sukuk as an instrument for investing. Research by Bahari et al. (2016) discussed the growth potential of sukuk in the global region and the challenges and criticisms faced by the sukuk market during the growth period of sukuk itself. Rafay et al. (2017) stressed the necessity for a solid global framework to standardize Islamic financial instruments. This descriptive and exploratory study employs secondary sources, save for a semi-structured interview with a sharia scholar to gain field knowledge and expertise. This study only examines Sukuk, the Islamic financial instrument that underpins the Ijarah-based contract, and other sukuk contract types have lower global acceptance.

The sukuk literature review then developed and discussed more specific matters such as retail sukuk and sukuk development. Rahman, Isa, Tu, et al. (2020) compiled and organized the SRI (Socially Responsible Investment) sukuk literature to provide thorough recommendations for systematic future research. This study reveals three primary research groups that comprise the literature on Sukuk SRI: the nature of SRI sukuk, the competitiveness of SRI sukuk, and the determinants of SRI sukuk. The factors influencing investments in SRI sukuk still need to be touched upon in this study. Additionally, despite the small number, this study demonstrates the close collaboration between Malaysia, Australia, and the United States in SRI sukuk research. According to this study, future research on investment motivation elements and the effects of SRI Sukuk on a country's economic development will be helpful. Harahap et al. (2021) used the literature study method of 100 journals published in 2010-2020 and carried out with the help of Publish or Perish software. Based on this research, it was found that there have been research developments related to sukuk over the past ten years, where the most research occurred in 2013, with Negara Malaysia being the country that publishes the most journals. In addition, this study also explained that literacy related to sukuk has many links with various interrelated keywords based on the results shown in Network Visualization.

Several researchers have also conducted studies of sukuk literature in bibliometric form. Paltrinieri et al. (2019) surveyed sukuk literature from 1950-2018, consisting of 80 papers using bibliometric citation analysis. This research shows several influential aspects such as countries, institutions, journals, authors, articles, and topics. Rani et al. (2022) discussed the development of sukuk research in Indonesia, which leading journals have published in Islamic financial economics. This study used 47 papers indexed by Scopus. These data are processed and then analyzed using VOSviewer software to determine the map of the development of bibliometric sukuk research in Indonesia. The results of this study show that sukuk in Indonesia has experienced a significant increase compared to other financial instruments. This study explained that the increase was 84% yearly from 2001 to 2007.

Research on sukuk has been studied by Mostapha (2017) and Uluyol (2021) by writing an overview and general concept of sukuk. Meanwhile, Rahman et al. (2020) studied retail sukuk literature on social responsibility, and Harahap et al. (2021) conducted a literature study on the development of sukuk research. In general, literature studies with bibliometric analysis discussing sukuk have been conducted by Paltrinieri et al. (2019) and Rani et al. (2022). On the other hand, Rafay et al. (2017) and Abdulkareem & Sadad (2020) discussed sukuk ijarah, while Bahari et al. (2016) and Ma'ruf (2021) discussed the opportunities and challenges of sukuk.

Studies discussing sukuk performance can be distinguished based on sukuk performance appraisal methods. Many researchers use quantitative analysis to examine the effect of certain variables on variables that present the performance of sukuk with sukuk. Quantitative analysis studies of sukuk performance use a variety of regression models (Alimuddin et al., 2020; Balcilar et al., 2016; Balli, Ghassan, Jeeфри et al., 2021; Hossain et al., 2021a; Laila et al., 2021; Mitsaliyandito et al., 2017a; Muhamed et al., 2022; Noriza et al., 2018; Uddin et al., 2022a).

In addition to the statistical approach, some researchers use qualitative analysis by interviewing various stakeholders and report documents on sukuk investment in assessing the development and performance of sukuk (Abdullah & Keshminder, 2022; Katterbauer, Syed, Cleenewerck et al., 2022; Keshminder et al., 2021; Rahman, Isa, Dewandaru, et al., 2020; Siswantoro, 2018b; Siswantoro & Surya, 2021).

Systematic literature reviews that discuss the specific performance of sukuk still need more attention. The performance of sukuk, the stakeholders' primary concern, needs to be studied in depth to provide a better research direction in the future. This research aims to provide an overview of the performance analysis studies of sukuk based on the methods used and the development and evaluation of sukuk performance.

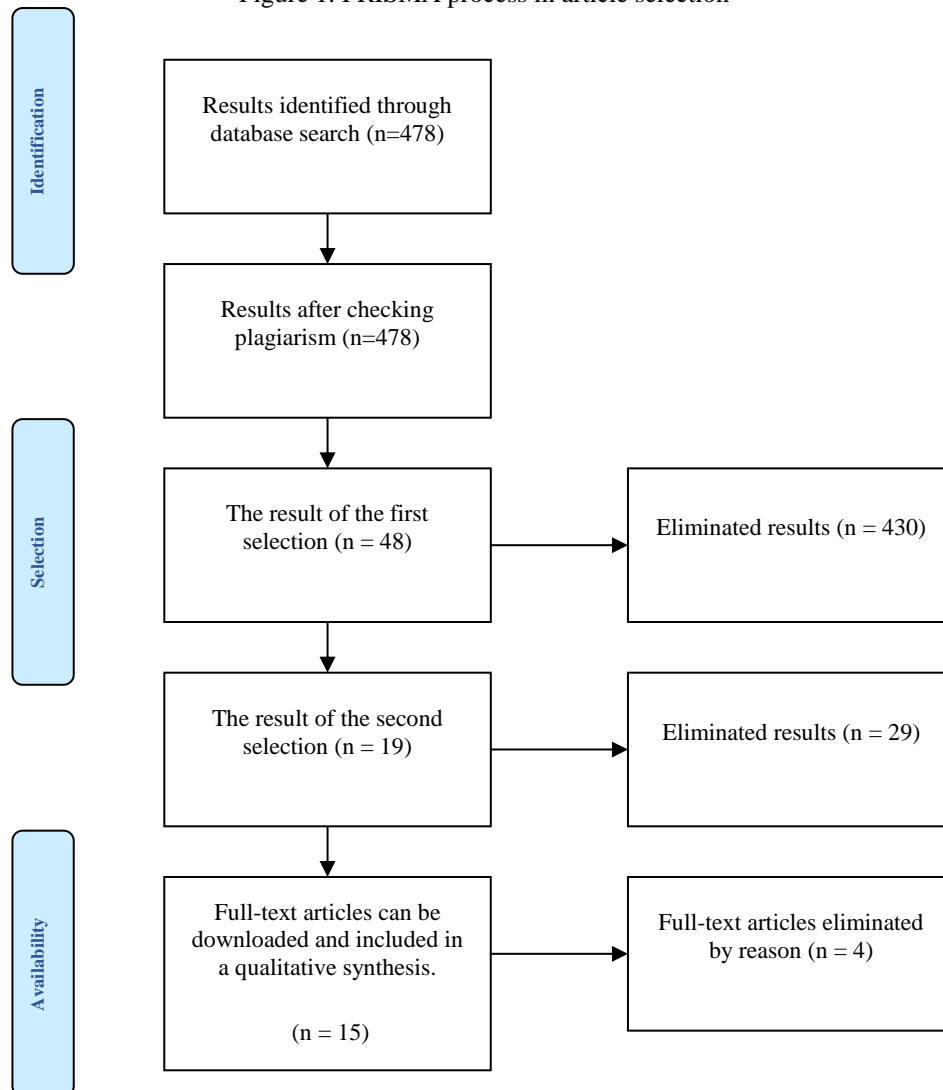
METHODOLOGY

This research is included in qualitative research using a literature review system and managed systematically. This method is expected to support the success of this research's objectives and clarify how extensive the research has been. PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) was utilized in this study to help researchers create systematic reviews. PRISMA is a research framework academics typically use to conduct systematic reviews and meta-analyses. PRISMA can give a thorough and simple-to-understand overview of the analyses and steps in filtering and reviewing the literature to be reviewed. This study used it.

All articles used in this study came from the Scopus database and were taken using a series of systematic and accurate procedures. At the beginning of this research step, using the keyword "sukuk" in the Scopus search box, and found the results of 478 documents related to the keyword while the access was carried out on July 26, 2022. This study does not limit the period. Based on the search results, there are research documents on sukuk from 2007-2022, with the most research occurring in 2021, as many as 69 documents, and the lowest research in 2007, with the results of only two documents.

After 478 documents were found, a screening process was carried out by adding the word "*performance*" to the search column and found 48 documents from 2007-July 2022. Then, the articles are filtered again to find articles that match the discussion of sukuk performance and leave as many as 19 articles ready for analysis. However, of the 19 articles, only fifteen can be downloaded in full after emailing several authors.

Figure 1. PRISMA process in article selection



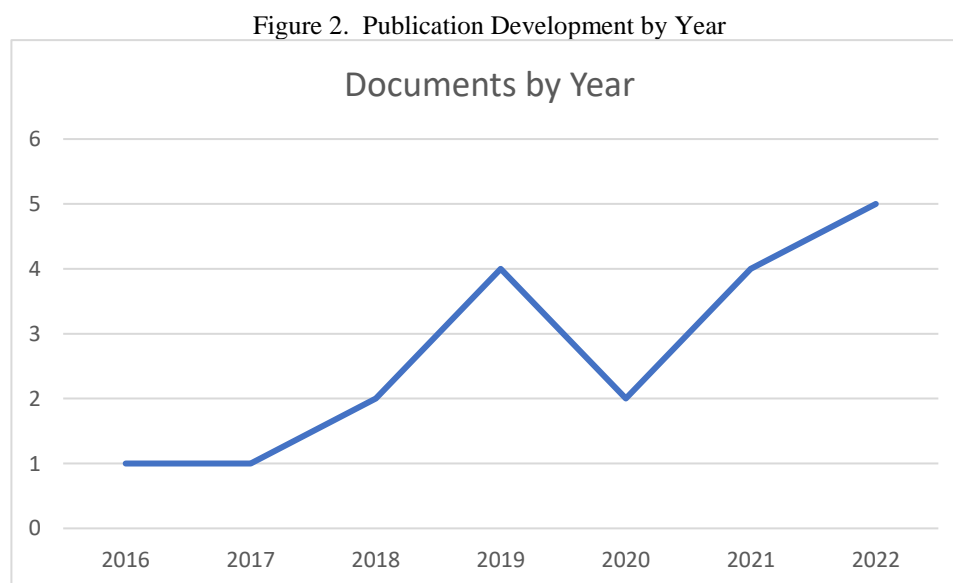
Source: Prepared by the authors (2023)

This study analyzed and synthetically mapped the results of studies on sukuk performance in research that has been carried out to find out the extent of research development to find opportunities for further research.

RESULTS AND DISCUSSION

This research provides results in two forms, namely in the form of descriptive analysis and the form of synthesis analysis around sukuk performance. Descriptive analysis results from a detailed analysis of research development in journals of sukuk performance publications in the form of pictures and tables. Meanwhile, synthesis analysis is the combined result of findings from fifteen full-text journals systematically studied and mapped. This analysis provides detailed results on the development of sukuk performance based on the year of publication, subject area, country, and journal, based on the most citations, analysis of word clouds, and TreeMap presented in images and tables.

Figure 2. shows a graph of the development of publications related to sukuk performance from 2016 to July 2022. In the six years, there are 19 publication documents, and the most publications related to sukuk performance occurred in 2022, namely five documents. Then the second most publications occurred in 2019 and 2021, with four documents each published. Meanwhile, in 2020 there was a decrease in publications from the previous year, with only two documents published.

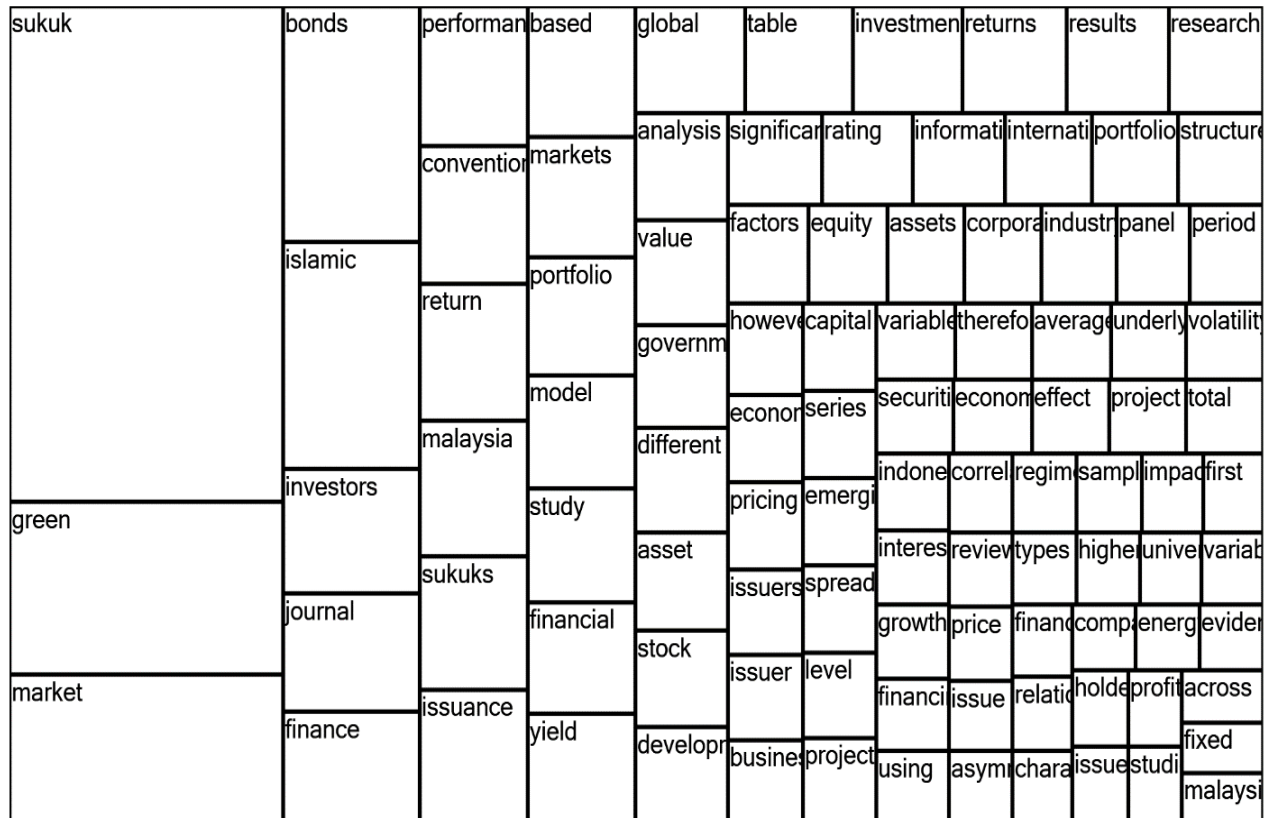


Source: Prepared by the authors (2023)

Table 1. shows nine journals with more than 1 citation. The table shows that the journal that has the highest number of citations is a journal with the title *“The impact of Sukuk on the performance of Conventional and Islamic Banks”* and a journal with the title *“Is There a Role for Islamic Bonds in Global diversification strategies,”* with 18 citations and has a presentation of 27.69% each. Then, it was followed by a journal entitled *“Sukuk and Bond Puzzle: An*

Figure 3. It shows that the word "Sukuk" has the most frequency of appearance, and the word "Green" is the word with the second most frequency of appearance, followed by the words "Market," "Bond," and "Islamic." These five words indicate a word that often appears in the publication of articles about the performance of Sukuk in the 2016-2022 time span.

Figure 4. Visualisai TreeMap in sukuk performance publication journal



Source: Prepared by the authors (2023)

TreeMap is one of the results or outputs of NVivo software that can be used to make it easier to analyze and visualize data. This technique results in words arranged in a checkerboard image, while the most powerful and frequently appearing words are depicted as a more expansive square. The more often the word appears, the broader its form will be.

Figure 4. It shows that the word "Sukuk" has the most frequency of appearance, and the word "Green" is the word with the second most frequency of appearance, followed by the words "Market," "Bond," and "Islamic." These five words indicate a word that often appears in the publication of articles about the performance of Sukuk in the 2016-2022 time span.

The analysis and discussion of the results should characterize the research context by describing the environment, conjuncture, or economic sector. Present the development of the

research. Structuring subsections in the sense of “responding” to the objectives to which the work proposes. It can be structured in subsections to respond to the work's proposed objectives.

The results of the synthesis of the sukuk performance publication journal are classified into two studies, namely quantitative studies and qualitative studies. Quantitative studies explain the methods used in quantitative research along with their dependent and independent variables to provide an overview of future research related to research methods and variables that should be used in future research. Meanwhile, qualitative studies provide an overview of the development and evaluation of sukuk performance based on findings from sukuk performance publication journals that use qualitative research. This study can provide information on the development and evaluation of sukuk performance which can be helpful for investors in considering the benefits and risks of investing using sukuk.

The first classification discussed in this study is related to quantitative study methods on sukuk performance. Based on Table 2 shows that the methods performed by the researchers vary. VAR (Vector Auto Regression) and MPRR (Multivariate Panel Robust Regressions) are frequently used methods.

Table 2. Classification of Quantitative Studies Based on Independent and Dependent Variables

Source of Literature	Method	Independent Variables	Dependent Variables
Mitsaliyandito et al. (2017)	Vector Auto Regression (VAR)	<ul style="list-style-type: none"> • Productivity of the use of funds • Sukuk essential assets/benefit rights to sukuk assets 	<ul style="list-style-type: none"> • The development of the sukuk market to GDP • Investor's actions when defaulting
Noriza et al. (2018)	Multivariate Panel Robust Regressions (MPRR)	<ul style="list-style-type: none"> • Issues and characteristics of issuers • GDP price • CEO duality • Council size • Religious Director 	<ul style="list-style-type: none"> • Issuance of long- and medium-term debt securities by issuers • Spread sukuk
Alimuiddin et al. (2020)	Data Envelopment Analysis (DEA), Efficiency Ratio Analysis, and Value at Risk (VaR)	<ul style="list-style-type: none"> • Degree of efficiency • Level of financing risk • Financing portfolio 	<ul style="list-style-type: none"> • Performance rating of SBSN/ government development financing sukuk and SUN/ Bond
Uddin et al. (2022)	Fama-MachBeth Regression	<ul style="list-style-type: none"> • Sukuk market risk • Risk of information asymmetry 	<ul style="list-style-type: none"> • Sukuk pricing
Balcilar et al. (2016)	Dynamic conditional correlation (DCC)	<ul style="list-style-type: none"> • Good and bad news in global debt markets 	<ul style="list-style-type: none"> • Dynamics of sukuk returns
Balli et al. (2021)	Panel Estimation and Quartile regressions (QR)	<ul style="list-style-type: none"> • Economic policy uncertainty (EPU) • Stock volatility indices (VIX) • US interest rates 	<ul style="list-style-type: none"> • Spread sukuk
Hossain et al. (2021)	Regression analysis	<ul style="list-style-type: none"> • Performance of the industrial market in which sukuk projects are financed 	<ul style="list-style-type: none"> • Sukuk financing performance

Muhamed et al, (2022)	Ordinal Regression Model (OLRM) and Ordinary least-square (OLS)	Logit Model and least-square (OLS)	<ul style="list-style-type: none"> • Profitability • Liquidity • Due date 	<ul style="list-style-type: none"> • Sukuk rating
Laila et al. (2021)	Logistic regression		<ul style="list-style-type: none"> • Sukuk structure 	<ul style="list-style-type: none"> • Sukuk Ranking • Spread sukuk

Source: Prepared by the authors (2023)

In the research conducted by Muhamed et al. (2022), the development of the Ordinal Logit Regression Model (OLRM) research model was used to determine whether the sukuk structure affects the ranking of sukuk, in addition to the Ordinary Least-Square model development model was also carried out. (OLS) to determine whether the structure affects the sukuk's sukuk yield. Ordinal logit research can be used when the dependent variable has more than two categories, with each category having a meaningful sequence with a higher value than before. A total of five sukuk ranks are multiple and used as dependent variables. In addition to the Ordinal Logit Regression Model (OLRM) method, Muhamed et al. (2022) also used the development of the Ordinary Least-Square (OLS) research method to analyze variable returns.

Laila et al. (2021) conducted a Logistic Regression study. Ordinal logistics dependent variables use data in scales or ordinal levels as sukuk ratings and independent variables in financial and non-financial factors for the dependent variials. In his research, a logit-commit approach was used with the population of Indonesian companies listed on the IDX in the vulnerable time of sukuk issuance from 2013-2019. Mitsaliyandito et al. (2017) used the Vector Auto Regression (VAR) method to measure causation and the impact of one variable on another. Four variables are used: sukuk, the development of the domestic state sukuk market, the development of the domestic corporate sukuk market, and GDP. This method was also used by Alimuddin et al. (2020) to compare the risk comparison of state sukuk and government bonds for the period 2014-2017 for later analysis. Meanwhile, to analyze the comparison of efficiency levels between state sukuk and government bonds in the 2014-2017 period, two analytical methods were used, namely the Data Envelopment Analysis (DEA) Method and the Efficiency Ratio Analysis.

Unlike the previous research, Noriza et al. (2018) developed a multivariate panel robust regressions (MPRR) research model. This research model aims to test the correlation between dependent and independent variables. Meanwhile, the Regression Analysis research method used by Hossain et al. (2021) The analysis uses two different regression models, namely the time-series autoregressive distribution lag (ADRL) model and time series regression to determine market events in each industrial sectors where the sector complies with all equity

markets. Uddin et al. (2022) follow the approach taken by the Fama-MacBeth regression to estimate the risk premium in common risk factors for sukuk investment returns. Of the fifteen journals studied in this study, only one researcher used this approach.

Some researchers use the Dynamic Conditional Correlation (DCC) method in this study. This research model is used by Balcilar et al. (2016). The results of their research show that good and bad news in the global debt market impacts the dynamics of sukuk returns in the opposite direction. Meanwhile, Balli et al. (2021) use the panel estimation method to utilize sukuk yield spreads. In addition, a quantile regression analysis method is also used, using three different quantiles, namely the 25th, 50th, and 75th percentile, to check whether different quantiles can give different results. This method makes it possible to observe whether the higher or lower spread levels of sukuk react to global shocks by the same method.

In addition to classifying related models of quantitative studies on sukuk performance, this study also discusses qualitative studies on the development and evaluation of sukuk performance. This study explains the development and evaluation of sukuk performance based on the findings of the sukuk performance publication journal.

Table 3. Review of qualitative studies on the development and performance evaluation of sukuk

Source of Literature	Sukuk Performance Development	Sukuk Performance Evaluation
Rahman, Isa, Dewandaru, et al. (2020)	<ul style="list-style-type: none"> • Social contributions such as investment in education are the main motivational drivers for investors and issuers. 	<ul style="list-style-type: none"> • Investment risk, return risk • lack of performance measurement standards • high transaction fees, • lack of sufficient Islamic bonds, • Investor confidence and lack of awareness are the main challenges in Sukuk development.
Abdullah & Keshminder (2022)	<ul style="list-style-type: none"> • Green sukuk is one of the low-cost financing options for green projects compared to conventional loans. 	<ul style="list-style-type: none"> • Competitiveness • Legitimacy • Ecological responsibility • Influence on the development of green sukuk performance
Keshminder et al. (2021)	<ul style="list-style-type: none"> • Support from the government in encouraging organizations to choose green sukuk as a green project financing option can encourage the development of green sukuk. 	<ul style="list-style-type: none"> • Unattractive green taxonomy • The difficulty of identifying green assets • Expensive time and cost • Lack of attractive benefits • High risk is evaluated in the development of sukuk performance.
Siswanto (2018)	<ul style="list-style-type: none"> • The rising trend of green sukuk prices is more attractive to traders. 	<ul style="list-style-type: none"> • The price performance of Indonesia's green sukuk gradually declined from the first date of issuance due to less conducive global market conditions.
Siswanto & Surya (2021)	<ul style="list-style-type: none"> • The performance of the second Indonesian green sukuk has better performance than the previously issued Indonesian green sukuk 	<ul style="list-style-type: none"> • Indonesia's green sukuk experienced a decline and increased again.

Katterbauer et al. (2022)	<ul style="list-style-type: none"> • Incentives for sukuk-issuer corporations are vital because they provide positive prospects and increased profits. 	<ul style="list-style-type: none"> • The impact of poor corporate performance reduces the value of Sukuk.
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Source: Prepared by the authors (2023)

This increasing need has led to the emergence of new financial instruments, one of which is sukuk. Based on research conducted by Balli et al. (2021), it was revealed that sukuk began to be introduced in the 2000s as an alternative to conventional bonds when viewed in terms of debt financing. While according to the years, sukuk has experienced very significant development. In 2003-2013 Sukuk, initially only \$5 billion in 2003, increased to more than \$130 billion in 2013. Hastuti (2017) revealed that sukuk could be used to increase the development budget because sukuk is developing rapidly.

Social contributions such as investment in the education sector are the main drivers for investors. Then the support from the government in encouraging organizations to choose green sukuk has a very impact on the development of green sukuk. This development is because green sukuk is one of the low-cost financing options for green projects compared to conventional loans. In addition, to support from the government, incentives are also a significant factor that can provide a positive outlook for profit increases.

Many other countries in Asia have begun to be interested in sukuk as an alternative to financing. Hong Kong became the top country as a gateway to the spread of sukuk to China, and China began launching its two sukuk in 2014 and 2015 (Katterbauer et al., 2022). This phenomenon has led to increased positive interest from Chinese companies to use sukuk as an alternative to their financing (Katterbauer et al., 2022).

Sukuk is more than just in demand by Muslim-majority countries. Many non-muslim countries are interested in sukuk financing. Katterbauer et al. (2022) argued that many non-Muslim countries are interested in sukuk financing due to the more profitable sukuk structure than conventional bonds.

Information regarding the development of sukuk performance has an important influence on investors because investors will compensate for potential risks that arise and allow investors to benefit from a better business environment if a corporation runs well. Conversely, if a corporation has poor performance, the valuation of sukuk will also drop significantly (Katterbauer, Syed, Cleenewerck et al., 2022).

In the development of sukuk performance, there are many challenges faced. Rahman, Isa, Dewandaru, et al. (2020) stated that the key obstacles to producing SRI sukuk instruments include a lack of measuring criteria in performance, high transaction costs, risk of returns, a

lack of suitable Islamic bonds, investor confidence, and a lack of knowledge. Based on research conducted by Keshminder et al. (2021), the poor green taxonomy, difficulties in identifying green assets, lengthy and costly processes, a lack of appealing rewards, and exposure to high-risk profiles are all problems plaguing the green sukuk market. This study facilitated the process of studies analyzing and mapping to evaluate so that the performance of sukuk can develop. The impact of poor corporate performance can reduce the value of the Sukuk. This study is the first evaluation of improving sukuk performance. Then Rahman, Isa, Dewandaru, et al. (2020) revealed that risk in investment, lack of measurement standards in performance, high transaction costs, risk of returns, lack of sufficient Islamic bonds, investor confidence, and lack of awareness are the main challenges of sukuk development. Sukuk has procedures that rely on regulations and authorities such as legality, mutually recognized specifications, and evidentiary schemes to measure its performance. However, it still needs a standard procedure for measuring its performance.

Furthermore, competitiveness, legitimacy, and ecological responsibility influence green sukuk (Abdullah & Keshminder, 2022). This responsibility is used not only as an evaluation for green sukuk but also for sukuk in general. Still related to green sukuk, Keshminder et al. (2021) demonstrated that the evaluation of sukuk performance development is impacted by the unattractive green taxonomy, the difficulty in finding green assets, the high cost, the lack of attractive advantages, and the serious dangers. Apart from that, Indonesia has experienced a decline in the performance of sukuk prices, especially green sukuk, from its first issuance, which is estimated to be caused by less conducive market conditions, which are observed from the decline in the Rupiah (IDR) currency. However, the study could be more reliable because the sukuk is denominated in US dollars instead of Rupiah (IDR). This phenomenon should not be the main cause of the decline in sukuk price performance (Siswantoro, 2018).

Sukuk continues to improve its performance and develops features and types of financing that are in great demand by investors. Sukuk focuses on sound financing practices and is socially responsible, stable, transparent, and prudent in considering risks. Cash flow structure depends on the industry sector where the business project originates, and the performance of the sukuk is not affected by the bond market's performance. Although the features of sukuk are similar to debt, sukuk is functionally different from bonds, and sukuk has a relationship with industry performance. L. Abubakar & Handayani (2017) explained that sukuk differs from conventional bonds because sukuk is proof of ownership of an asset or project, not a bond. Meanwhile, conventional bonds are debt securities where the issuer is

domiciled as a borrower so that investors will get the return on the debt on loan with a specific added value. Meanwhile, in sukuk, investors will get results from the management of sukuk assets so that they are safer and free from elements of *gharar*, *maysir*, and usury.

A research model for measuring the performance of sukuk for further research needs to be developed. Not only do they use profitability and liquidity as independent variables, but it is necessary to expand the sample and analyze whether the results are consistent and whether investors are more concerned with mere profits or social contributions. The Randomized Controlled Trial (RCT) method can be developed as a link between literature relating to evaluation and assessment (Williams, 2023). Research within and beyond the social sector can benefit significantly from this since it can show how methodologies and ideals are interdependent (Williams, 2023). One of the performance models of sukuk also needs to consider aspects of Environment Social Government (Anikin et al., 2023), which are the advantages of green sukuk (Alam et al., 2023). The Islamic financial instrument known as sukuk incorporates the Shariah legal principles that significantly emphasize protecting the natural world and the welfare of society (Katterbauer, Syed, Genç, et al., 2022).

Following up on the findings of developments and evaluating the performance of what incentive sukuk and who is obliged to provide incentives needs to be discussed further. Then the role of the government in the development of sukuk also needs to be discussed further. The role of the government in improving public infrastructure using sukuk financing options as an alternative is also interesting to study (Adelopo et al., 2023).

The development of research on what can affect sukuk, especially green sukuk, also needs to be studied more broadly. The volatility spillover of oil price analysis is an exciting topic for future research. Then whether oil price fluctuations impact the development of green sukuk can also be further studied in subsequent research (Su et al., 2023).

CONCLUSION

This research aims to analyze previous papers covering the's performance of sukuk in the financial markets. This study will help researchers, investors, and investment management funds discuss sukuk performance. Literature review in more specific areas discussing sukuk performance still needs to be improved. The sukuk performance study method varies. The VAR and MPRR are this study's most dominant research methods. Social contributions such as investment in the education sector are investors' main drivers and motivations to invest. In addition, social contributions in the education sector are also the main drivers for issuers to

develop sukuk financing. Compared to traditional loans, green sukuk can significantly reduce the overall cost of a green project's funding. As the government's involvement can affect the growth of green sukuk, it must encourage this condition while communicating the benefits of green sukuk to businesses. Sukuk's returns, notably green sukuk's, have decreased. Based on the examination results, the value of Indonesian green sukuk has fallen over time from the day it was initially issued. Then the impact of the company's poor performance also affects the value of sukuk. Conceptualization that has not been maximized and a lack of social responsibility can reduce investor confidence. In addition, the influence of the global market can also cause a decrease in sukuk interest. Research on the spillover of oil price volatility is an interesting topic to discuss in future research. The impact of oil price fluctuations on the development of sukuk performance also needs to be further researched.

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