

## FIQH BI'AH ANALYSIS ON SOCIAL ENVIRONMENTAL AUDIT

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**Abstract** : This research aims to analyze the application of Fiqh Bi'ah (Islamic environmental Fiqh) in social environmental auditing practices, focusing on how Islamic principles can improve environmental accountability and sustainability. Using qualitative research methods, this study's object includes applying Fiqh Bi'ah principles in social environmental auditing. The data collection techniques used are interviews, observation, and document analysis, with data analysis through data reduction, verification, and conclusion drawing. The results show that the application of Fiqh Bi'ah principles, such as *Khilafah* (guardian of the earth), *Mizan* (balance), as well as the prohibition of *Fasād* (destruction) and *Isrāf* (waste), strengthen the moral and ethical framework in environmental auditing. The limitations of this study lie in the limited sample size and less generalizability of the findings beyond the university context. The novelty of this study is that it theoretically combines Islamic teachings with environmental auditing practices and practically provides guidance in improving environmental accountability based on Islamic values. It is recommended that organizations incorporate Fiqh Bi'ah principles, such as *khilafah*, *mizan*, and the prohibition of *fasād* and *isrāf*, into their environmental auditing frameworks to enhance accountability and sustainability in line with Islamic ethical values

**Keywords** : *Fiqh Bi'ah, Social Environmental Audit.*

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### 1. INTRODUCTION

The worsening environmental crisis has become a global problem that requires serious attention from various parties, including academics, institutions, and the government (Jauhari et al., 2023). Air pollution, climate change, deforestation, and overexploitation of natural resources are all impacts of unsustainable human activities. (Fad, 2021). One solution to this issue is through Social Environmental Audits, which aim to assess the environmental impact of an organization's activities and ensure they comply with environmental regulations and maintain a balanced ecosystem (Ishak, 2019).

In the Islamic context, Fiqh *Bi'ah* (environmental Fiqh) principles provide moral and spiritual guidance for humanity to protect the environment (Arfan et al., 2024). Islam teaches that humans are *khalifah* (guardians) on earth who must preserve and maintain the balance of nature (*Mizan*) by the will of Allah SWT. This principle is contained in various verses of the Qur'an, one of which is in Surah Al-A'raf: 31, which teaches that humans should not commit *Isrāf* (waste) and destruction (*Fasād*) of the earth (Ali & Hassan, 2020). Thus, applying Fiqh *Bi'ah* in social environmental auditing is one of the important steps in upholding moral

responsibility and environmental ethics for organizations and institutions (Ali & Hassan, 2020).

Previous research shows that the implementation of social and environmental audits that refer to sustainability values has proven effective in improving the environmental performance of organizations. According to research (Asni & Sulong, 2020), Socio-environmental audits help identify environmental risks and formulate more effective mitigation strategies. In addition, Asni's research emphasizes that regular environmental audits can increase management and staff awareness of environmental responsibilities and prevent financial losses caused by legal sanctions related to environmental violations (Asni, 2022). However, research examining the application of Fiqh *Bi'ah* principles in Social Environmental Auditing is limited. This study aims to fill that gap by analyzing how Fiqh *Bi'ah* principles, such as *Khilafah*, *Mizan*, *Fasād*, and *Isrāf*, can be systematically applied in social environmental auditing practices. In addition, it also explores how applying these values can enhance an organization's environmental accountability and responsibility, particularly in the face of global sustainability challenges. This research is important because it combines Islamic perspectives with modern practices in environmental management, which is expected to significantly contribute theoretically and practically to maintaining ecological balance and preserving nature (Fakhrunnas, 2018).

There has been much research on social environmental auditing, especially focusing on how organizations can improve environmental performance through regulatory compliance, implementation of sustainable practices, and evaluation of environmental impacts. For example, (Tenriwaru & Popy Alfisyhar, 2023a) highlighted the importance of social environmental audits in identifying risks and creating mitigation strategies to reduce environmental impacts. Other research by (Ibrahim & Mohamed, 2022) shows that environmental audits can increase corporate awareness and responsibility for the environment.

However, there is a research gap in the context of religious values-based approaches, particularly from the perspective of Fiqh *Bi'ah* (environmental Fiqh in Islam). Most previous studies focus more on various countries and companies' legal frameworks and general sustainability standards. (Tenriwaru & Popy Alfisyhar, 2023b). Research that integrates Islamic principles, such as *Khilafah* (guardian of the earth), *Mizan* (balance), as well as prohibitions against *Fasād* (destruction) and *Isrāf* (waste), in social environmental audits is still very limited (Hermawan & Wibawa, n.d.).

In addition, previous research generally does not focus on how Fiqh *Bi'ah* can be practically applied in social environmental auditing as an ethical and moral guide for organizations, especially in environmental responsibility. Thus, this research gap centers on the lack of empirical and theoretical studies linking the principles of Fiqh *Bi'ah* with the implementation of Social Environmental Audits, which can provide a new perspective in improving faith-based environmental accountability.

The novelty of this research lies in combining the theory of Fiqh *Bi'ah* with the practice of social environmental auditing. Theoretically, this research offers a new contribution by integrating Islamic concepts such as *Khilafah*, *Mizan*, *Fasād*, and *Isrāf* into the social environmental audit framework, which was previously dominated by international standards such as ISO 14001 or the Global Reporting Initiative (GRI). Thus, this research enriches the literature on social environmental

auditing and introduces an Islamic religious perspective on sustainability management.

Practically, the novelty of this research lies in developing an Islamic values-based environmental audit model, which is expected to guide organizations, particularly in Muslim-majority countries, to integrate religious values into environmental sustainability practices. This is expected to increase moral and spiritual accountability in protecting the environment so that organizations focus on economic profit legal compliance, and social and environmental responsibility by Islamic teachings. This research provides innovation in how organizations view Social Environmental Audits, not only as a regulatory compliance tool but also as an instrument to enhance broader moral responsibility with a religious foundation.

## 2. THEORY AND METHODS

### 1. *Fiqh Bi'ah*

*Fiqh Bi'ah*, a combination of the words “*Fiqh*” and “*al-Bi'ah*,” means “understanding” and “environment.” The combination of these two words can be interpreted as “The law of responsible behavior regarding the problem of human action which aims to regulate life together so that the benefit can be realized which is oriented towards the efforts and goals of environmental conservation.” The word environment as a meaning comes from the word *al-Bi'ah* which is then associated with the word “*Fiqh*” which in terms means knowledge that explains the provisions of Islamic law related to human actions, where this knowledge is based on *dalil al-tafshiliyyah*. (Khatib et al., 2022). Thus, environmental *Fiqh* can be summarized as knowledge and *shar'i* guidance on ecology and become a medium to criticize human actions that do not treat the environment well.

Regarding environmental *Fiqh*, it can be expected to provide color in every framework during the process and the results of the scholars' *ijtihad*. The insensitivity of *Fiqh* in highlighting the increasing ecological problems is another form of effort to give legitimacy to environmental damage. *Fiqh* will be used as a good foundation, and no need to look down. Then the problem that makes *Fiqh* cannot mean anything in answering contemporary problems. The environment is a place of worship that still needs to be considered by Muslims (Saleem & Mansor, 2020).

This problem is not far from the understanding of Muslims so far that they have a view of the obligation to apply devotion to God and *ijtihad*. At the same time, God has given the mandate to humans to protect what He has created. To achieve environmental *Fiqh*, efforts are needed to revitalize *ushul al-Fiqh*, which creates *Fiqh*. In that case, *ushul al-Fiqh* can be called a science that explains theoretical praxis, which provides an understanding of actions, logic, behavior, and praxis methodology (Sani & Abubakar, 2020). Thus, revitalization, which is *ushul al-Fiqh*, can be expected to return the entire *Fiqh* building to its fundamental foundation, namely *mashlahah* (the benefit of the universe).

### 2. Social Environmental Audit

An audit is an action that compares the facts or circumstances with the circumstances that should exist. An audit aims to verify that the subject of the audit has been completed or is running by approved and accepted standards, regulations, and practices. A Social Environmental Audit is an examination of the impact of an

organization's operations on the surrounding environment, impacts that can be direct or indirect (Kamaruddin et al., 2024b).

### 3. Research Methods

This study employs an analytical observational design, specifically a case-control design (Briley et al., 2019). This study employs a qualitative approach (Alonso et al., 2020). A qualitative approach is employed when data is gathered and presented as words or sentences (Taskinsoy, 2021). Qualitative research places a high emphasis on the quality of data, which leads to the exclusion of statistical analysis (Singarimbun, Peter Hagul, and Chris Manning. 2008 In Masakazu et al., 2023).

Based on the discussion method, this study can be classified as descriptive. A descriptive study aims to provide a comprehensive account and analysis of a particular situation, object, or event, presenting the facts without any interpretation or bias (Ozturkcan et al., 2022). The objective of this descriptive study is to generate a methodical, objective, and precise portrayal or illustration of the information, qualities, and connections among the phenomena being examined ( Moh. Nazir. 1988 In Rangga et al., 2022).

Based on the study's location, this study can be categorized as a case study (Kamaludin et al., 2021). Field study involves gathering data and information by utilizing various materials discovered in the field (Hoffman et al., 2020). The study is classified as a causal study because it seeks solutions to existing problems, aligning with the nature of this investigation ( Uma Sekaran. 2015 In Pendidikan Ekonomi Undiksha et al., 2023).

Qualitative data analysis is performed where the empirical data comprises qualitative information expressed through words rather than numerical values and cannot be easily categorized or classified into structured frameworks (Vázquez-Parra et al., 2022). Data can be collected through various methods, such as observations, interviews, document analysis, and tape recordings. Before using data, it is commonly subjected to pre-processing procedures such as documenting, writing, modifying, or transcription. Nevertheless, qualitative analysis predominantly depends on textual data structured into extensive passages without utilizing mathematical computations or statistical methods as a means of analysis (Cardella et al., 2021).

As per Miles and Huberman, analysis encompasses three concurrent tasks: data reduction, data presentation, and conclusion (Bossu et al., 2020). Simultaneous occurrence refers to the interconnected and recurrent nature of data reduction, presentation, and conclusion drawing/verification. This process involves continuous interaction before, throughout, and following data collection, forming multiple stages that contribute to the development of overarching insights known as analysis (Rangga et al., 2022).

Qualitative studies employ various methods to analyze data, such as interpreting interview outcomes, reducing and analyzing data, interpreting findings, and employing triangulation (Kamaruddin et al., 2024a). Conclusions can be derived from the examination of data. Researchers employ various data analysis methods when conducting their studies:

#### 1. Data Reduction

The process of data reduction cannot be considered separate from the analysis. Data reduction involves the careful selection, diminution, conceptualization, and

alterations of raw data obtained from notes (Maryaningsih et al., 2022). Data reduction efforts occur constantly, particularly during qualitatively oriented studies or data gathering (Bindseil et al., 2019). In the data collection process, various techniques are employed to analyze and condense the information. These techniques involve summarization, code, topic identification, group creation, data division, and memo writing (Fung & Siu-Cheong, 2017).

Data reduction is a process that enhances, categorizes, guides, eliminates unnecessary data, and arranges data to generate and validate conclusions (Khalid, 2020). Following the completion of field research, the data reduction or transformation process persists until the final report is fully accomplished. Due to its versatility, qualitative research can be streamlined and transformed through different methods, such as meticulous selection, concise summarization, classification within a broader framework, and similar approaches (Biggeri et al., 2018; Khalid, 2020).

## 2. Triangulation

Researchers utilize the triangulation approach to evaluate the credibility of the data (Mohd Ali et al., 2020). In its most fundamental form, triangulation is a technique for validating data that involves comparing the results of interviews with the object (Kadek Indri Wira Pratiwi et al., 2023). Triangulation can be achieved through different methods, such as conducting interviews, making observations, and referring to relevant documentation (Nasution, 2003 In Arfianti & Reswanda, 2020). Triangulation serves the purpose of validating the information's precision and enhancing the data (Kshetri, 2021). Moreover, as per Nasution, triangulation can be advantageous in assessing the validity. Therefore, triangulation exhibits an introspective nature (Kumhof & Noone, 2018).

Moloeng distinguishes four types of triangulations: sources, methodologies, investigators, and theories (Moloeng, 2004 In Kadek Indri Wira Pratiwi et al., 2023). Researchers only employed examination procedures by utilizing sources in this work out of the four types of triangulations (Wang & Hausken, 2022). Source triangulation involves juxtaposing and verifying information obtained from various sources at different points in time and using different methods or tools (Erlita et al., 2018). The following steps were performed to achieve such reliability:

1. Contrasting data obtained from observations with data obtained from interviews.
2. Examining the disparity between individuals' public and private statements.
3. Analyzing the evolution of opinions regarding the research situation over some time.
4. Analyzing an individual's situation and viewpoints about diverse opinions and perspectives held by individuals from different social strata.
5. Analyzing the findings of an interview about the information presented in a corresponding document.

Meanwhile, Tedi Cahyono claimed that, in qualitative research, triangulation is a procedure that, in addition to other processes, must be passed by a researcher and that this process determines the validity elements of the material gathered to be compiled in a study (Mohd Ali et al., 2020). Verifying data validity involves

utilizing an alternative method to assess or contrast the data rather than relying solely on it. Checking through different sources is the most common triangulation technique (Chandna, 2022). The triangulation model is intended to eliminate the contradiction between qualitative and quantitative techniques, allowing for the true discovery of the right theory (Laili et al., 2023).

According to Murti, (2006.), the overall goal of triangulation is to improve the theoretical, methodological, and interpretive strength of research (Iancu et al., 2021). Thus, triangulation is vital in bridging the gap between qualitative and quantitative research, and (Yin & Campbell, 2003.) states that triangulation data gathering incorporates observation, interviews, and documentation (Staicu, 2021).

Data presentation is qualitative research's second most significant action (Kamaruddin & Hanefah, 2023). Data presentation is a collection of facts organized such that it is possible to draw conclusions and take action (Ulber Silalahi, 2009 In Rangga et al., 2022).

In the past, narrative material in tens, hundreds, or even thousands of pages was commonly employed for qualitative data presentation (Chiu et al., 2019). On the other hand, large amounts of narrative material exceed the load of human ability to assimilate information (Krishna et al., 2022). Humans have limitations when it comes to processing large amounts of information. Instead, they tend to condense intricate data into simpler and more selective forms that are easier to comprehend (Algabry et al., 2020)

Qualitative data can be presented in various matrices, graphs, networks, and charts. All of them aim to merge structured data in a logical and easily comprehensible manner. As a result, data presentation is a component of the analysis (Sani & Abubakar, 2020).

### 3. RESULTS AND DISCUSSION

#### 3.1. Environmental Fiqh's View on Social Environmental Audit

The environmental Fiqh's view on social environmental auditing is that it is an important tool to ensure human responsibility in maintaining and preserving nature (Hidayat & Mayasari, n.d.). Grounded in Islamic principles such as responsibility as a Khalifah, avoiding harm, justice, *amar ma'ruf nahi munkar*, and maintaining balance, social environmental auditing helps guide organizations and companies to act environmentally responsibly. Relevant Quranic verses support this audit's role in safeguarding Allah's mandate of the earth and all that it contains.

In the view of environmental Fiqh, humans have the role of Khalifah on earth, which carries the responsibility not to damage the environment and maintain the balance of the ecosystem. Social environmental auditing measures, evaluates and ensures that human activities, especially those carried out by organizations and companies, do not negatively impact the environment. The following is an environmental Fiqh view of social environmental auditing, along with relevant verses from the Quran:

#### Responsibility as Caliph

Islam emphasizes that humans were created as Khalifah (leaders), responsible for managing and protecting the environment. A social environmental audit is a tool to ensure this responsibility is properly implemented. It can evaluate the extent to

which an organization or company carries out its responsibilities towards environmental preservation.

هُوَ الَّذِي جَعَلَكُمْ خَلَائِفَ فِي الْأَرْضِ فَمَنْ كَفَرَ فَعَلَيْهِ كُفْرُهُ وَلَا يَزِيدُ الْكَافِرِينَ كُفْرَهُمْ إِلَّا مَقْتًا وَلَا يَزِيدُ  
 الْكَافِرِينَ كُفْرَهُمْ إِلَّا خَسَارًا ﴿٣٩﴾

Meaning: "It is He who made you caliphs on the earth." (QS. *Fathir: 39*)

This verse emphasizes the role of humans as Khalifah on earth, which requires them to be responsible for managing the environment and natural resources.

### Avoiding Damage (Facade)

Environmental Fiqh teaches avoiding damage and making amends (*islah*). Social Environmental Audits help ensure that human activities, both individual and collective, do not cause harm to the environment. By identifying and correcting practices that harm the environment, these audits help realize the goal of environmental Fiqh to safeguard nature.

﴿٥٦﴾ وَلَا تُفْسِدُوا فِي الْأَرْضِ بَعْدَ إِصْلَاحِهَا وَادْعُوهُ خَوْفًا وَطَمَعًا إِنَّ رَحْمَتَ اللَّهِ قَرِيبٌ مِّنَ الْمُحْسِنِينَ

Meaning: "And do not cause corruption in the earth, after (Allah) has made it right." (QS. *Al-A'raf: 56*)

This verse is a warning not to destroy what has been created well by Allah, encouraging humans to preserve nature. Furthermore, the verse related to social environmental auditing which reads:

﴿٤١﴾ ظَهَرَ الْفَسَادُ فِي الْبَرِّ وَالْبَحْرِ بِمَا كَسَبَتْ أَيْدِي النَّاسِ لِيُذِيقَهُمْ بَعْضَ الَّذِي عَمِلُوا لَعَلَّهُمْ يَرْجِعُونَ

Meaning: "There is corruption on land and in the sea because of the deeds of men; Allah wills that they should taste some of the consequences of their deeds, so that they may return (to the right path)" (QS. *Ar-Rum: 41*)

This verse emphasizes that the destruction of the earth is the result of man's actions, which prompts the need for auditing and monitoring to avoid further damage.

### Principles of Fairness and Accountability

Islam emphasizes the principles of justice and accountability in all aspects of life, including environmental management. Social Environmental Auditing ensures that companies and organizations act fairly and responsibly towards the environment. By conducting audits, organizations can evaluate and report on the environmental

impacts of their activities, ensuring transparency and fairness.

يَا أَيُّهَا الَّذِينَ آمَنُوا اتَّقُوا اللَّهَ وَقُولُوا قَوْلًا سَدِيدًا ﴿٧٠﴾

It means "O you who believe, fear Allah, and speak the truthful word (QS. Al-Ahzab: 70)

This verse teaches the importance of speaking and acting correctly, including in terms of maintaining and reporting environmental conditions.

### **Amar Ma'ruf Nahi Munkar (Inviting Good and Preventing Evil)**

Environmental Fiqh supports the concept of amar ma'ruf nahi munkar, which means inviting goodness and preventing destructive actions. Social Environmental Auditing is one way to discourage environmentally destructive actions and encourage good and sustainable practices. It ensures that organizations comply with environmental regulations and avoid harmful practices.

﴿١٠٤﴾ وَلَتَكُنْ مِنْكُمْ أُمَّةٌ يَدْعُونَ إِلَى الْخَيْرِ وَيَأْمُرُونَ بِالْمَعْرُوفِ وَيَنْهَوْنَ عَنِ الْمُنْكَرِ وَأُولَٰئِكَ هُمُ الْمُفْلِحُونَ

Meaning "And let there be among you a group of people who call to virtue, enjoining the good, and forbidding the evil; they are the ones who are in succession (QS. Ali 'Imran: 104)

This verse encourages Muslims to encourage good practices and prevent bad ones, including preserving the environment.

### **Balance and Justice in Natural Resource Management**

Islam teaches the importance of maintaining balance (*Mizan*) in nature, which is part of the justice emphasized in Fiqh. Social Environmental Auditing maintains this balance by assessing the environmental impacts of human activities and providing guidance to mitigate negative impacts, ensuring justice for all living beings.

وَالسَّمَاءَ رَفَعَهَا وَوَضَعَ الْمِيزَانَ ﴿٧﴾  
أَلَّا تَطْغَوْا فِي الْمِيزَانِ ﴿٨﴾

Meaning "And Allah has raised the heavens and He has set a balance (of justice). So that you may not transgress the limits of the balance." (QS. Ar-Rahman: 7-8)

This verse emphasizes the importance of maintaining balance and justice in all aspects, including environmental management.

### 3.2. Yusuf Qardhawi's View on Social Environmental Audit Policy

Yusuf Qardhawi has an in-depth view of environmental issues within the framework of Fiqh *Bi'ah* (Environmental Fiqh). In the context of Social Environmental Auditing, Qardhawi's views based on Islamic principles can be applied to encourage accountability and social responsibility of companies or institutions towards environmental impacts. The following are four of Yusuf Qardhawi's Fiqh *Bi'ah* views that can be linked to the Social Environmental Audit policy:

#### Humans as Caliphs (Managers) of the Earth

Qardhawi emphasizes that humans are mandated as khalifah (managers) of the earth by Allah. As Khalifah, humans are responsible for utilizing natural resources and protecting and maintaining them. In the context of Social Environmental Audit, this concept requires companies or institutions to evaluate transparently the impact of their activities on the environment. They must act as good stewards, not just seeking economic gain but also ensuring that the natural resources they use are not damaged or depleted.

This audit policy allows the public or authorities to measure the extent to which the company has carried out its responsibilities as a Khalifah who maintains environmental balance.

#### Prohibition of Destruction (Fasad) and Waste (Israf)

In Qardhawi's view, Islam prohibits *Fasād* (destruction) and *Isrāf* (waste) of resources. In the context of social environmental auditing, this policy can be translated as the importance of measuring and reporting on the environmental impact of each company's actions. This audit will examine whether the company is involved in activities that harm the environment, such as pollution, overuse of resources, or poor waste management. This principle encourages companies to avoid irresponsible practices and ensure they operate by sustainability principles.

This audit is one of the tools to ensure that companies do not engage in *Isrāf* or *Fasād* towards the environment.

#### Transparency and Accountability

Yusuf Qardhawi's Fiqh *Bi'ah* encourages transparency and accountability in all human actions, including in environmental management. In social environmental auditing, transparency is key to knowing whether companies comply with applicable environmental rules and assessing the social impact of their economic activities. Qardhawi emphasizes that every human being (or entity) will be held accountable for their actions, including protecting the environment. Therefore, Social Environmental Audits can be seen as a form of moral and spiritual responsibility for companies to measure and report on how much they have safeguarded the environment and contributed to social welfare.

#### Balance (*Mizan*) and Ecological Justice

Qardhawi often cites the concept of *Mizan* (balance) as the foundation of the creation of the universe. In this context, a Social Environmental Audit aims to evaluate

whether the company's economic and operational activities have maintained the ecological balance or have damaged it. Islam emphasizes the importance of justice, and in the environmental context, this justice includes the rights of all living beings and ecosystems. An environmental audit aims to ensure that no party is harmed by acts of environmental destruction and that the company contributes to preserving the ecological balance for the benefit of all creatures.

#### 4. CONCLUSION

This research makes a significant contribution to merging the perspectives of Fiqh *Bi'ah* (Islamic environmental Fiqh) with the modern practice of social environmental auditing. The results show that Islamic principles, such as *Khilafah* (guardian of the earth), *Mizan* (balance), as well as prohibitions against *Fasād* (destruction) and *Isrāf* (waste), can strengthen the ethical framework of social environmental auditing. By adopting these principles, organizations and companies can improve environmental accountability, maintain ecosystem balance, and adhere to moral standards rooted in Islamic teachings.

In addition to providing theoretical guidance, this study has practical implications by proposing an Islamic values-based environmental audit model, which can be applied especially in Muslim-majority countries. Applying this model is expected to improve sustainability performance and provide added value in corporate moral and spiritual responsibility.

However, this study has several limitations, including the limited sample and the lack of generalization of the results beyond the context of this study. Nonetheless, this research opens up opportunities for further studies in integrating religious teachings with modern sustainability practices, contributing to both the literature and the practice of environmental auditing.

#### REFERENCES

- Algabry, L., Alhabshi, S. M., Soualhi, Y., & Alaeddin, O. (2020). Conceptual framework of internal Shari'ah audit effectiveness factors in Islamic banks. *ISRA International Journal of Islamic Finance*, 12(2), 171–193. <https://doi.org/10.1108/IJIF-09-2018-0097>
- Ali, M. M., & Hassan, R. (2020). Survey on Shari'ah non-compliant events in Islamic banks in the practice of tawarruq financing in Malaysia. *ISRA International Journal of Islamic Finance*, 12(2), 151–169. <https://doi.org/10.1108/IJIF-07-2018-0075>
- Alonso, S. L. N., Fernández, M. Á. E., Bas, D. S., & Kaczmarek, J. (2020). Reasons fostering or discouraging the implementation of central bank-backed digital currency: A review. *Economies*, 8(2). <https://doi.org/10.3390/ECONOMIES8020041>
- Arfan, A., Athroz Arfan, I., & Alkoli, A. (2024). LEGALITY: JURNAL ILMIAH HUKUM The Implementation of Maqashid Sharia: Heterogeneity of Scholars' Fatwas Towards Islamic Banking Contracts. *LJIH*, 32(1), 105–128. <http://www.ejournal.umm.ac.id/index.php/legality>
- Arfianti, U., & Reswanda, R. (2020). Break Even Point Analysis As A Basic of Profit Planning In Handal Insan Sentosa Batik Business. *Quantitative Economics and Management Studies*, 1(3). <https://doi.org/10.35877/454ri.qems1390>

- Asni, F. (2022). The difference of Shariah risk potential and Shariah risk in personal financing products based on tawarruq munazzam contracts practised in Malaysia. *Qualitative Research in Financial Markets*, 14(1), 95–118. <https://doi.org/10.1108/QRFM-01-2021-0013>
- Asni, F., & Sulong, J. (2020). The mura'ah al-khilaf and ma'alat method in fatwa decisions: its application for fatwa coordination related to conditional hibah in Malaysia. *International Journal of Islamic and Middle Eastern Finance and Management*, 14(4), 641–654. <https://doi.org/10.1108/IMEFM-05-2018-0181>
- Biggeri, M., Testi, E., Bellucci, M., Doring, R., & Persson, H. T. R. (2018). Social entrepreneurship and social innovation: Ecosystems for inclusion in Europe. In *Social Entrepreneurship and Social Innovation: Ecosystems for Inclusion in Europe*. Taylor and Francis. <https://doi.org/10.4324/9781351239028>
- Bindseil, U., Central Bank, E., & Bindseil, U. (2019). *Central Bank Digital Currency-financial system implications and control*. <https://www.researchgate.net/publication/333149469>
- Bossu, W., Itatani, M., Margulis, C., Rossi, A., Weenink, H., & Yoshinaga, A. (2020). *Legal Aspects of Central Bank Digital Currency: Central Bank and Monetary Law Considerations*.
- Briley, J. E., Lotfi Boumediene, S., Yahn-Shir Chen, B., Ekanayake, E., Fleischman, G. M., Guo Wells Fargo Bank, Z.-Y., Han-Ching Huang Chung Yuan, N., Livingston, L. S., Meric, G., Mohnot, R., Naimi, L., Rambo, C., Stewart, J., Swagerman, D., Thaver, R., Vento Regent, G. A., Matthew Walker, C., & Ncube, M. (2019). The International Journal of Business and Finance Research Evidence on The Troubled Assets Relief Program, Bailout Size, Returns and Tail Risk. *The International Journal of Business and Finance Research*, 13(2), 1–20. [www.theIBFR.com](http://www.theIBFR.com)
- Calle, G., & Eidan, D. (2020). *Central Bank Digital Currency: an innovation in payments*.
- Cardella, G. M., Hernández-Sánchez, B. R., Monteiro, A. A., & Sánchez-García, J. C. (2021). Social entrepreneurship research: Intellectual structures and future perspectives. *Sustainability (Switzerland)*, 13(14). <https://doi.org/10.3390/su13147532>
- Chandna, V. (2022). Social entrepreneurship and digital platforms: Crowdfunding in the sharing-economy era. *Business Horizons*, 65(1), 21–31. <https://doi.org/10.1016/j.bushor.2021.09.005>
- Chiu, J., Davoodalhosseini, M., Jiang, J., & Zhu, Y. (2019). *Bank Market Power and Central Bank Digital Currency: Theory and Quantitative Assessment*. [www.bank-banque-canada.ca](http://www.bank-banque-canada.ca)
- Erlita, N., Noviana, G., Meruya, J., No, S., & Barat, K. J. (2018). *Website Management www.kemenpar.go.id in Promoting Lake Toba As an Indonesian Tourism Object* (Vol. 219). [www.kemenpar.go.id](http://www.kemenpar.go.id)
- Fad, M. F. (2021). Revitalization of Fiqh Al-Bi'ah in the Implementation of Green Banking for Islamic Bank. *Journal of Islamic Economics Lariba*, 11–24. <https://doi.org/10.20885/jielariba.vol7.iss1.art2>
- Fakhrunnas, F. (2018). *Fatwa on the Islamic Law Transaction and Its Role in the Islamic Finance Ecosystem*. 4(1), 42–53. <http://ejournal.unida.gontor.ac.id/index.php/altijarah>

- Fung, W. ;, & Siu-Cheong, B. (2017). *Standard-Nutzungsbedingungen*. <https://doi.org/10.34989/sdp-2017-16>
- Hermawan, S., & Wibawa, D. A. (n.d.). *Audit Lingkungan di Indonesia dan Pembelajaran dari Amerika Serikat dan Malaysia*.
- Hidayat, O. ;, & Mayasari, Z. (n.d.). *Pengaruh Audit Lingkungan , Fungsi Pemeriksaan Audit Internal, dan Kertas Kerja Pemeriksaan Audit Terhadap Pelaporan Audit Manajemen dengan Dampaknya Terhadap Informasi Kinerja Komisaris Terhadap Lingkungan pada Pdam Kota Bandung*.
- Hoffman, S., Garnaut, J., Izenman, K., Johnson, M., Pascoe, A., Ryan, F., & Thomas, E. (2020). *The flipside of China's central bank digital currency Policy Brief*. [www.aspi.org.au](http://www.aspi.org.au)
- Iancu, A., Popescu, L., & Popescu, V. (2021). Factors influencing social entrepreneurship intentions in Romania. *Economic Research-Ekonomika Istrazivanja* , 34(1), 1190–1201. <https://doi.org/10.1080/1331677X.2020.1820358>
- Ibrahim, R., & Mohamed, A. S. (2022). Assessing Public Sector Environmental Accountability Through Performance Audit: The Case of Maldives. *Jurnal Tata Kelola Dan Akuntabilitas Keuangan Negara* , 45–63. <https://doi.org/10.28986/jtaken.v8i1.755>
- Ishak, M. S. I. (2019). The principle of maṣlaḥah and its application in Islamic banking operations in Malaysia. *ISRA International Journal of Islamic Finance* , 11(1), 137–146. <https://doi.org/10.1108/IJIF-01-2018-0017>
- Jauhari, F. F., Yusoff, S. S. M., & Kassim, S. (2023). Enhancing Access to Finance Amongst Asnaf Micro Entrepreneurs: How Can Islamic Fintech in Zakat Institutions Play a Role? In *Contributions to Management Science: Vol. Part F1204* (pp. 345–357). Springer Science and Business Media Deutschland GmbH. [https://doi.org/10.1007/978-3-031-27860-0\\_31](https://doi.org/10.1007/978-3-031-27860-0_31)
- Kadek Indri Wira Pratiwi, N., Adi Wibawa, K., & Made Wena, I. (2023). Analysis of Student Error Based on Newman's Procedure In Solving Hots Types Reviewing From Cognitive Style FI and FD. *Jurnal Pendidikan Matematika* , 7(1), 1–14.
- Kamaludin, M. F., Xavier, J. A., & Amin, M. (2021). Social Entrepreneurship and Sustainability: A Conceptual Framework. *Journal of Social Entrepreneurship*. <https://doi.org/10.1080/19420676.2021.1900339>
- Kamaruddin, M. I. H., & Hanefah, M. M. (2023). Professional shariah audit training via the e-learning approach during COVID-19: challenges and prospects. *Asian Journal of Accounting Research* , 8(3), 250–268. <https://doi.org/10.1108/AJAR-12-2021-0284>
- Kamaruddin, M. I. H., Shafii, Z., Hanefah, M. M., Salleh, S., & Zakaria, N. (2024a). Exploring Shariah audit practices in zakat and waqf institutions in Malaysia. *Journal of Islamic Accounting and Business Research* , 15(3), 402–421. <https://doi.org/10.1108/JIABR-07-2022-0190>
- Kamaruddin, M. I. H., Shafii, Z., Hanefah, M. M., Salleh, S., & Zakaria, N. (2024b). Issues and Challenges in Shariah Audit Practices in Malaysian Shariah-Based Sectors. *The*

- Journal of Muamalat and Islamic Finance Research*, 82–100. <https://doi.org/10.33102/jmifr.564>
- Khalid, A. A. (2020). Role of Audit and Governance Committee for internal Shariah audit effectiveness in Islamic banks. *Asian Journal of Accounting Research*, 5(1), 81–89. <https://doi.org/10.1108/AJAR-10-2019-0075>
- Khatib, S. F. A., Abdullah, D. F., Al Amosh, H., Bazhair, A. H., & Kabara, A. S. (2022). Shariah auditing: analyzing the past to prepare for the future. In *Journal of Islamic Accounting and Business Research* (Vol. 13, Issue 5, pp. 791–818). Emerald Group Holdings Ltd. <https://doi.org/10.1108/JIABR-11-2021-0291>
- Krishna, B., Krishnan, S., & Sebastian, M. P. (2022). Examining the Relationship between National Cybersecurity Commitment, Culture, and Digital Payment Usage: An Institutional Trust Theory Perspective. *Information Systems Frontiers*. <https://doi.org/10.1007/s10796-022-10280-7>
- Kshetri, N. (2021). The Economics of Central Bank Digital Currency [Computing's Economics]. *Computer*, 54(6), 53–58. <https://doi.org/10.1109/MC.2021.3070091>
- Kumhof, M., & Noone, C. (2018). *Staff Working Paper No. 725 Central bank digital currencies-design principles and balance sheet implications*. [www.bankofengland.co.uk/working-paper/Working-papers](http://www.bankofengland.co.uk/working-paper/Working-papers)
- Laili, N., Ghani, A., & Saffa' Shaharuddin, S. (2023). *Internal Control System and Effective Internal Shariah Audit Function: A Conceptual Framework* (Vol. 6, Issue 2).
- Maryaningsih, N., Nazara, S., Kacaribu, F. N., & Juhro, S. M. (2022). Central Bank Digital Currency: What Factors Determine Its Adoption? *Buletin Ekonomi Moneter Dan Perbankan*, 25(2), 1–24. <https://doi.org/10.21098/bemp.v25i1.1979>
- Mohd Ali, N. A., Shafii, Z., & Shahimi, S. (2020). Competency model for Shari'ah auditors in Islamic banks. *Journal of Islamic Accounting and Business Research*, 11(2), 377–399. <https://doi.org/10.1108/JIABR-09-2016-0106>
- Murti, B. (n.d.). *Desain dan Ukuran Sampel untuk Penelitian Kuantitatif dan Kualitatif di Bidang Kesehatan*.
- Ozturkcan, S., Senel, K., & Ozdinc, M. (2022). Framing the Central Bank Digital Currency (CBDC) revolution. *Technology Analysis and Strategic Management*. <https://doi.org/10.1080/09537325.2022.2099261>
- Pendidikan Ekonomi Undiksha, J., Masakazu, K., Sisdianto, E., Suwardika, G., & Setyo Nugroho, D. (2023). *Peran Digital Freelancer Marketplace dan Media Sosial Terhadap Perkembangan Gig Economy Worker*. 15(1). <https://doi.org/10.23887/jjpe.v15>
- Rangga, K. K., Yanfika, H., Mangesti, R. A., Rudy, Bursan, R., Rahmat, A., & Adipathy, D. A. (2022). The influence of decision making of farmers choosing rice varieties on rice productivity levels in Central Lampung Regency. *IOP Conference Series: Earth and Environmental Science*, 1027(1). <https://doi.org/10.1088/1755-1315/1027/1/012013>
- Saleem, S., & Mansor, F. (2020). Exploring Compliance of AAOIFI Shariah Standard on Ijarah Financing: Analysis on the Practices of Islamic Banks in Malaysia. *Journal of Risk and Financial Management*, 13(2). <https://doi.org/10.3390/jrfm13020029>

- Sani, S. D., & Abubakar, M. (2020). A proposed framework for implementing risk-based Shari'ah audit. *Journal of Financial Reporting and Accounting*, 19(3), 349–368. <https://doi.org/10.1108/JFRA-02-2020-0041>
- Staicu, D. (2021). Characteristics of textile and clothing sector social entrepreneurs in the transition to the circular economy. *Industria Textila*, 72(1), 81–88. <https://doi.org/10.35530/IT.072.01.202031>
- Taskinsoy, J. (2021). Say Good Bye to Physical Cash and Welcome to Central Bank Digital Currency. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3972858>
- Tenriwaru, T., & Popy Alfisyhar. (2023a). Implementasi Audit Lingkungan di Kawasan Pesisir Pantai ( Studi Kasus Pantai Di Makassar ). *Jurnal Buana Akuntansi*, 8(1), 69–78. <https://doi.org/10.36805/akuntansi.v8i1.3654>
- Tenriwaru, T., & Popy Alfisyhar. (2023b). Implementasi Audit Lingkungan di Kawasan Pesisir Pantai ( Studi Kasus Pantai Di Makassar ). *Jurnal Buana Akuntansi*, 8(1), 69–78. <https://doi.org/10.36805/akuntansi.v8i1.3654>
- Vázquez-Parra, J. C., Cruz-Sandoval, M., & Carlos-Arroyo, M. (2022). Social Entrepreneurship and Complex Thinking: A Bibliometric Study. *Sustainability (Switzerland)*, 14(20). <https://doi.org/10.3390/su142013187>
- Wang, G., & Hausken, K. (2022). A Two-Period Decision Model for Central Bank Digital Currencies and Households. *International Journal of Finance & Banking Studies (2147-4486)*, 11(2), 49–68. <https://doi.org/10.20525/ijfbs.v11i2.1789>
- Yin, R. K., & Campbell, D. T. (n.d.). *Design and Methods*.