Vosviewer Application on Islamic Social Investment

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This study aims to see the development of research on the topic of Islamic Social Investment and research plans that can be carried out based on journals published on the theme. This research uses a qualitative method with a bibliometric analysis approach. The data used is secondary data with the theme "Islamic Social Investment" which comes from the Scopus database with a total of 309 journal articles. Then, the data is processed and analyzed using the VosViewer application with the aim of knowing the bibliometric map of Islamic Social Investment research development in the world. The results of the study found that, based on bibliometric keyword mapping there are 7 clusters that can become research paths with topics related to Islamic Finance and Responsible Investment, Corporate Governance & Islamic Social Investment, Financial Cooperation & Islamic Social Investment, Waqf & Islamic Social Investment, Fintech & Islamic Social Investment, Economic Growth & Islamic Social Investment, and Covid-19 & Sustainable Islamic Social Investment. Furthermore, the most used words are country, Islamic bank, performance, investor, value, institution, international economics, risk, sukuk, and waqf.

Keywords: Islamic Social Investment, Research Map, VosViewer

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INTRODUCTION

Islamic social investment is a form of socially responsible investment that adheres to the principles and guidelines of Islamic law, specifically the Quran, Sunnah, Qiyas, and Ijma. It aims to balance wealth in society and stop economic exploitation. Islamic finance is similar to socially responsible investment, as both place principle-based restrictions on the profit motive and have grown rapidly over the past two decades. The Islamic concept of social investment is rooted in Islamic ethics and is aimed at social benefit. It is a form of financing that incorporates principles derived from Infaq, Sadaqah, Hiba, and Waqf, and aims to achieve social harmony and sustainability. Islamic social investment is based on the principles of justice, halal, and blessings, and emphasizes the importance of ethics and social responsibility. It involves internalizing the environment as part of socio-economic goals to achieve social good and offers a more sustainable response from a social market community-based system than a market-based system (Alhabshi, 2021; Abubakar & Aysan, 2022).

Islamic social investment is strongly linked to the concepts of sustainability and development, and has been identified as a potential solution to the funding gap for the Sustainable Development Goals (SDGs) (Abubakar & Aysan, 2022). The concept of social investment in Islam is also reflected in the teachings of Sufism, which plays an important role in balancing human life and providing peace, coolness, and friendliness to create religious and social harmony (Nafi’i & Guniaiandi, 2021). Islamic social investment and conventional social investment are both approaches to investing in socially responsible and sustainable projects. However, they differ in their management processes and underlying principles.

Islamic social investment is based on the principles of Islamic finance, which derive from Islamic law. It aims to promote justice, equality, and ethics, leading to social welfare and sustainable economic activities (Samra & Joseph, 2018; Syed Azman et al., 2022). Examples of the two main forms of Islamic finance that exist in investment are bank finance and the issuance of Islamic securities (sukuk). In Islamic finance, investors seek competitive returns on their investments while considering the impact of their investments on society. Conventional social investment, on the other hand, focuses on investing in companies, organizations and funds that create a positive social or environmental impact. This approach initially focused on avoiding investments that cause social or environmental harm, known as negative screening. However, impact investing, a recent trend in the SRI discipline, focuses on investing in companies and organizations that can create positive social or environmental impacts, known as positive screening (Syed Azman et al., 2022).

While there are similarities between Islamic and conventional social investment, such as the desire to create positive social and environmental impacts, the main difference lies in the management process and underlying principles. Islamic social investment is guided by the principles of Islamic finance, while conventional social investment is guided by the principles of social responsibility and sustainability. This is confirmed by research from Syed Azman et al. (2022) who compared the performance of sustainable and responsible investment sukuk (SRI), social impact bonds (SIB), and conventional bonds, finding that SRI sukuk are seen as different instruments from conventional instruments, such as SIB and CB. Another study from Shear & Ashraf (2022) comparing the performance of Islamic and conventional stocks during the COVID-19 pandemic found that Islamic stocks outperformed conventional stocks in certain periods, thus indicating that Islamic investment is one of the "safe havens" for investors during the crisis.

Islamic social investment offers several benefits or advantages. First, it encourages social responsibility, sustainability and ethical principles, leading to social welfare and sustainable economic activities (Toto et al., 2020). Second, it increases philanthropic capacity and fosters a more philanthropic climate from both a corporate and individual perspective (Ethis, 2023). Third, it strengthens the capital market ecosystem to make it more conducive to impact investing, promoting financial inclusion and greater social impact (Yesuf & Assouli, 2020). Fourth, it encourages investment in sectors such as renewable energy, healthcare, education and socially responsible businesses, thus opening up opportunities beyond religious boundaries (Clarke, 2023). Fifth, it encourages the sharing of wealth and risk, reduces economic inequality and increases market participation, and promotes strong and stable societies and healthy economies, thus providing greater stability in the long run (Ethis, 2023).

Besides that, Islamic social investment also faces various challenges or problems in its development. Among the main problems of Islamic social investment revealed by Siswantoro & Ihkwon (2023) explains that many people have not realized the potential of Islamic Social Finance (ISF) as an alternative financial instrument that can help overcome various problems faced by Muslims and revitalize the economy, especially in countries where the majority of the population is Muslim like Indonesia. Of course, this also affects the development of Islamic social investment, which is also part of ISF. Challenges such as moral hazard, agency problems, lack of regulation, problems with sharia boards, and financial inclusion can also be obstacles in its application (Miah et al., 2023).

Thus, it is important to see the extent of the current development of Islamic social investment
through research, and one method that can be used to see the development of research is bibliometrics using VosViewer. The method is able to create and display author journal maps and research paths based on co-citation data or keyword maps based on co-occurrence data. A number of relevant studies include Charfeddine et al (2016) investigating the performance of ethical and conventional investments. The empirical results show that ethical investments, ethical investments have lower performance compared to unfiltered benchmarks. In addition, using cointegration analysis, the empirical results show the absence of a long-run relationship between Islamic and conventional indices which offers new potential for portfolio diversification in the local market. However, there is a long-run relationship between the SR index and its conventional counterpart. On the other hand, the cointegration test shows that the Islamic index and the social responsibility index have a long-run relationship only for the FTSE index.

Marwan et al (2019) examined the fundamental principles of Social Impact Bond (SIB) and Sustainable and Responsible Investment (SRI) sukuk compared to the values contained in maqasid al-Shari'ah and maslahah. Specifically, this research discusses that SIB and SRI sukuk are financial mechanisms that reflect the ethical and moral framework of Shari'ah because their underlying principles are in line with the concepts in maqasid al-Shari'ah and maslahah. Therefore, SIB and SRI sukuk models should receive more attention from Islamic banks and Islamic financial institutions whose philosophical foundation is built on the principles of maqasid al-Shari'ah and maslahah.

Ismail & Aisyah (2021) explored the status of Islamic social finance literature using bibliometric analysis by identifying statistics on the number of publications from year to year, influential aspects, visualization of keyword occurrence, and text data related to the topic of Islamic social finance. The results found that only a few articles discuss Islamic social finance. Islamic social finance was most discussed in 2019 which tried to deal with the Covid-19 pandemic problem. Therefore, the journals that make the biggest contribution to the study of Islamic social finance are al-Shajarah and the International Journal of Islamic and Middle Eastern Finance and Management. IIUM and INCEIF contributed the most to the literature related to Islamic social finance from the author's affiliation. Malaysia is the country that contributes the most to the writing of Islamic social finance literature. Furthermore, the most selected Islamic finance research keywords are Islamic social finance, maqasid Shari'ah, value-based intermediation, sustainable development goals, and waqf. For the most encountered text data, six clusters discuss the role of Islamic social finance in Covid-19, culture and country cases regarding Islamic social finance, sustainable development goals, ecosystems, and maqasid Shari'ah.


Based on a number of these studies, there has been no research that specifically examines Islamic Social Investment using bibliometric analysis. Therefore, this research was conducted to complement existing research and fill the void of previous research and to expand the literature related to Islamic social investment through the research path. In particular, the purpose of this research is to see the development of Islamic social investment research around the world published by journals with this theme and see future research opportunities by formulating a research agenda.

**RESEARCH METHOD**

In this study, various scientific journal publications related to the theme of "Islamic Social Investment" around the world were used as data sources. Data is collected by searching for journal publications indexed in the Scopus database using the keyword "Islamic Social Investment". After that, scientific articles or journals that are relevant to the research theme will be selected based on the publication data that has been collected. Journals equipped with DOI are the criteria in the screening process and data processing using software. There are 309 journal articles published from within the research theme "Islamic Social Investment". The development of publication trends related to the research topic was analyzed using VOSviewer software, which can generate bibliometric maps and allow for more detailed analysis.

In order to build the map, VOSViewer uses the abbreviation VOS which refers to Visualizing Similarity. In previous studies, the VOS mapping technique has been used to obtain bibliometric visualizations which are then analyzed. Furthermore, VOSviewer is able to create and display author journal maps based on co-citation data or keyword maps based on co-occurrence data. Therefore, this study will analyze journal maps related to "Islamic Social Investment", including author maps, and keywords which are then analyzed for research paths that can be carried out in the future through clusters in keyword mapping.

This research uses a descriptive qualitative approach with meta-analysis and descriptive statistical literature study based on 309 journal publications that discuss the theme of "Islamic Social Investment". Meta-
RESULT AND DISCUSSION

This research discusses "Islamic Social Investment" by utilizing 538 publications of journal articles indexed in Scopus. Bibliometrics is a method used to measure and evaluate scientific performance by taking into account factors such as citations, patents, publications, and other more complex indicators. Bibliometric analysis is conducted to evaluate research activities, laboratories, and scientists, as well as the performance of countries and scientific specializations. Some of the steps in bibliometric analysis include identifying the background of the research, collecting the databases to be used, and determining the main indicators to be used in the research.

This section will deepen the meta-analysis results by showing a visual mapping chart depicting 309 journals related to "Islamic Social Investment". In this research, mapping is done by analyzing keywords and important or unique terms contained in journal articles. Mapping is a process to identify knowledge elements, configurations, dynamics, dependencies, and interactions between these elements. The results of network visualization of 309 journals with the theme "Islamic Social Investment" will be explained in more detail in the next section.

Bibliometric Author Mapping

By using bibliometric analysis using VOSviewer software, a mapping of authors contributing to the field of "Islamic Social Investment" is obtained. The resulting image provides a visual representation of the mapping, the bigger and brighter the point marked in yellow, the more the number of journal publications related to the theme of "Islamic Social Investment" that have been published by that author.

The figure above explains that the cluster density in the bibliometric map depends on the intensity of the yellow color shown. And the yellow color on the map depends on how many items are related to other items. For this reason, this section is very important to get an overview of the general structure of the bibliometric map that is considered important to analyze. From this, it is possible to identify the authors who publish the most works.

In general, each author or researcher has different tendencies in each publication of their work. On some occasions, an author appears as a single author, but on other occasions the author can write together with other authors or researchers, so that it will affect the density of the cluster and some clusters show different densities. However, authors who have a large enough cluster density identify that the author has published the most research on the theme of "Islamic Social Investment".
when compared to authors whose cluster density is lower, so the results found can be a reference for other researchers in the future. From the results of the analysis, it was found that the authors who published the most publications related to Islamic Social Investment were Ahmed A; Mertzanis C; and Stumpfegger E.

Research Map

The figure below describes the trend of keywords that appear in research on the theme of "Islamic Social Investment" and the larger shapes are the most used words in journal publications on the theme of "Islamic Social Investment".

Figure 2. Research Mapping

As for the mapping, the keywords that appear most in the publication "Islamic Social Investment" include country, Islamic bank, performance, investor, value, institution, international economics, risk, sukuk, and waqf which are then divided into 7 clusters, as follows:

Table 1. Research cluster of Islamic social investment

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Keywords</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 1 (24 items)</td>
<td>Case study, compliance, energy, ESG, ethical investment, financial inclusion, financial instrument, financial stability, governance, instrument, integration, investor, Islamic capital market, islamic fund, Islamic investment, Islamic law, kind, principle, responsible investment, SDGs, sri sukuk, sukuk</td>
</tr>
<tr>
<td>Cluster 2 (22 items)</td>
<td>Corporate governance, corporate social responsibility, CSR, customer, disclosure, equity, finance company, improvement, independence, Islamic bank, Islamic financial institution, perception, performance, profitability, responsibility, social responsibility, stakeholder, understanding</td>
</tr>
<tr>
<td>Cluster 3 (22 items)</td>
<td>Attention, borrower, central asia, conflict, cooperation, country, credit, emergence, financial institution, government, institution, measure, operation, organization, policy, poverty, presence, problem, resource, security, way, world</td>
</tr>
<tr>
<td>Cluster 4 (18 items)</td>
<td>Accountability, attitude, beneficiary, cash waqf, intention, management, Muslims, social capital, social welfare, sustainable development, transparency, trust, value, waqf, waqf asset, waqf company, waqf institution, waqf poverty</td>
</tr>
<tr>
<td>Cluster 5 (12 items)</td>
<td>Account, capital, company, criterium, crowdfunding, efficiency, fintech, gold, Islamic index, Islamic stock market, money, transaction</td>
</tr>
<tr>
<td>Cluster 6 (11 items)</td>
<td>Business, debt, economic growth, economy, evidence, globalization, growth, international economics, Islamic equity, risk, volatility</td>
</tr>
<tr>
<td>Cluster 7 (9 items)</td>
<td>Asset, conventional bank, covid, effectiveness, financial performance, muslim majority country, pandemic, sustainable finance &amp; investment, woman</td>
</tr>
</tbody>
</table>
Research mapping clusters that can be created based on 7 keyword mapping clusters, namely:

**Cluster 1: Islamic Finance and Responsible Investment**

Alam et al (2016) explained Green Sukuk as an innovation in the Islamic capital market. This research examines green sukuk as a sharia-compliant investment vehicle that funds environmentally friendly projects such as solar power plants, biogas power plants, and wind power plants. The main objective behind the development of green sukuk is to address shariah concerns in protecting the environment. For Shariah-compliant investors particularly in Southeast Asia and the Gulf Cooperation Council region, green sukuk represent an ideal investment that benefits the environment and encourages Corporate Social Responsibility. This research also maps the differences between more conventional types of socially responsible investment (SRI) and morally guided funds promoted through Islam.

Hussain et al (2019) explain how companies react to equity price shocks based on classifications arising from social pressures rather than financial objectives to maximize shareholder wealth. The results document that both compliant and non-compliant firms decrease book debt ratios as the value of the firm’s equity increases. In contrast, compliant firms tend to increase book debt ratios during periods of declining equity values. Non-compliant firms do not significantly change the book debt ratio during periods of falling equity prices. This finding suggests that while firms tend to lower debt levels due to potential future growth, the response is not symmetrical during periods of stock price suppression.

Therefore, screening between compliant and non-compliant companies allows investors to distinguish companies that are sustainable in the long run, which further enables diversification when owning a socially responsible investment portfolio.

Ibrahim et al (2021) explained the role of Islamic finance in encouraging circular business investment in the case of Qatar’s Tire Industry. The results explained that Islamic finance’s profit and loss sharing financing mode can be used to support circular businesses motivated by Sharia objectives. Financial regulatory authorities and Islamic financial institutions also need to consider the risks associated with climate change and linear economic activities in asset valuation and pricing.

Blended Islamic finance is an important tool that can drive investment and attract funding for circular businesses. A circular business financing ecosystem can be built in Qatar by combining the profitable and charitable sectors in the context of Impact investing and Shariah objectives. This means that Qatar Development Bank, Qatar Charity, Islamic Banks, and Qatar Fund for Development can work together to attract the needed funding for circular businesses in Qatar and also attract entrepreneurial talent to Qatar to support the Circular Economy transition. Circular businesses such as the tire industry, plastic recycling, and others require the attention of policy makers within the scope of sustainability and achieving Qatar National Vision 2030.


**Cluster 2: Corporate Governance & Islamic Social Investment**

Alhammadi et al (2018) examined the risk-return characteristics of these accounts and compared them to the returns and risks of shareholders in the same banks. The results explain that for most banks (9 out of 28), the CV return of PSIAs is higher than the ROE of shareholders, which suggests that in these cases PSIAs receive a higher return than shareholders. Similarly, for 7 out of 20 banks in the sub-sample, the CV of PSIAs’ return is higher than that of shareholders’ dividend yield. In explaining the magnitude of the difference between PSIAs rate of return and shareholder ROE, the variable that has the greatest explanatory power is the return on assets, implying that when this return is high, the bank takes the maximum share of mudharib profits. Some of the other corporate governance variables show expected signs, as do the country dummies that represent the maturity of the Islamic banking market, but there is little evidence on the effectiveness of corporate governance in protecting the interests of UIAHs.

Erragraguy & Revelli (2015) examined the potential of integrating positive ESG screening with Islamic portfolios using KLD social ratings, to determine the financial price required by Islamic compliance and social responsibility. The results showed no adverse impact on returns due to the implementation of Islamic and ESG screening; significantly higher performance resulted from the inclusion of good governance criteria in the post subprime crisis period.

Farook et al (2011) developed and tested a theoretical model of the determinants of social disclosure of Islamic banks. The results explained that corporate social responsibility (CSR) disclosure by Islamic banks varied significantly across the sample. Based on the regression results, the variation is best explained by the variable “relevant public influence” and the variable "Islamic corporate governance mechanism (DPS Supervisory Board)". Using an alternative variable measure, the regression results show that "degree of
social and political freedom” and "proportion of investment account deposits to total assets” are also significant determinants of Islamic banks’ CSR disclosure.

Cluster 3: Financial Cooperation & Islamic Social Investment

In particular, no research has been found that examines Financial Cooperation & Islamic Social Investment. Financial cooperation and Islamic social investment refer to a concerted effort to combine the principles of Islamic finance with social objectives. This includes a number of concepts and practices that can strengthen economic and social development, taking into account the values and ethics contained in Islamic principles.

Cluster 4: Waqf & Islamic Social Investment

Putri (2021) explains the optimization of Cash Waqf Linked Sukuk (CWLS) to support the development of social investment and productive waqf. The results of the study explain that CWLS has a positive and significant impact on investment development. Thus, it can be concluded that CWLS is one of the factors that can influence investment development using the regression method. CWLS has a positive and significant impact on Productive Waqf. So, it can be concluded that CWLS is one of the factors that can influence Productive Waqf.

Cluster 5: Fintech & Islamic Social Investment

Yoshida (2019) discusses how FinTech, financial services supported by the high utilization of information and communication technology (ICT), can unlock the potential of cash waqf, particularly in the context of social finance. Waqf has played a social finance role including in the early era of Islamic history. With the rapid advancement of ICT and the increasing population of personal communication devices such as mobile phones, smartphones, and computers, cash waqf will create immense social value if enhanced with ICT, which this study calls "FinTech-enabled cash waqf". This study proposes a possible expansion of FinTech-enabled cash waqf forms, including microfinance, as a socially valuable financial system. The necessary legal treatment and other necessary conditions are also discussed from a practical point of view, including the aim of becoming a reference for policymakers and social enterprise entrepreneurs. Academic considerations regarding cash waqf through FinTech are also put forward, especially regarding criticisms of current Islamic finance practices from theory-based academics. This process identifies the academic and religious significance of FinTech-enabled cash waqf, not just as a form of social finance transaction. In the last section, the study concludes that cash waqf through FinTech can contribute to socio-economic development in Islamic communities.

Sa’ad et al (2019) proposed an innovative Islamic fintech investment P2P musharakah smart contract model for SME financing and social development. This research tries to develop a new peer-to-peer financing based on Musharakh Smart Contract. It also proposes a Musharakh model using Musharakh Smart Contract where investors will credit their investment for the purpose of Musharakh with virtual lenders for specific Shariah-compliant businesses and share the profits, based on agreed dividends based on the principles of Musharakh. It also highlights the potential structure, risks of cyberspace, and tools to mitigate them by using musyaraka standards and measures in accordance with Shari’ah principles.

Cluster 6: Economic Growth & Islamic Social Investment

Nosheen & Rashid (2020) studied the impact of banking development attributed to Islamic banks on economic growth and domestic investment in a data set consisting of 20 countries that have Islamic and conventional banks operating side by side during the period 1995 to 2014, using a "two-step system GMM". The results show that Islamic banks boost economic growth and domestic investment by increasing the depth and size of their intermediation, and by providing more credit to the private sector. The development of conventional banking also promotes economic growth and domestic investment by increasing its assets as a percentage of total banking assets. Islamic banking has a more meaningful impact on economic activity because its transactions are based on physical assets and linked to the real economy. Shariah promotes social justice and equality and prohibits them from engaging in harmful products and activities.

Azman & Ali (2016) explained the Social Impact Bond (SIB) and Sustainable and Responsible Investment (SRI) sukuk, towards the sustainable growth of the Islamic finance industry. The results of this study concluded that there is an increasing interest in innovative tools such as SIBs and SRI sukuk globally. Furthermore, these tools exemplify the spirit of risk sharing and social responsibility that is the very essence of Islamic finance which is currently missing in practice.

Cluster 7: Covid-19 & Sustainable Islamic Social Investment

Setiawan et al (2022) analyzed asset price performance groups, based on stock markets in Muslim-majority and Group of Seven (G7) countries and alternative financial assets. The results showed that the severity of the pandemic negatively affected the price performance of some assets, such as Indonesia (Jakarta Islamic Index), the UK (United Kingdom100 Index, ESG (Environmental, Social, and Governance), commodities, 10-year US bonds, and Bitcoin, but the price performance of other assets moved in the opposite direction, for example Malaysia (FBMHS Index), the US (S&P 500 Index), and gold. During the pandemic, most assets became riskier. Furthermore, the prices of G7 and Islamic stocks and alternative asset classes have different price and risk convergence patterns. The capital markets of Muslim-majority countries moved randomly that is,
they tended not to converge in the pre-crisis period. However, before and during the pandemic, asset risks converged in Muslim-majority markets, meaning that Muslim-majority markets tended not to converge in the pre-crisis period. The risk of investing in assets there has a long-term risk that follows the same pattern (i.e. if it increases in one country, assets in other countries will follow). This pattern makes it easier for investors to observe and make risk decisions on investments in Islamic assets in Muslim-majority countries, so that investments in such assets are sustainable.

Marwan et al (2022) explained the determinants of the successful implementation of Sustainable and Responsible Investment Sukuk (SRI) for economic recovery from the COVID-19 pandemic. The results showed that overall, the five most important CSFs according to respondents' perceptions are as follows: good governance framework, fulfillment of ethical standards, transparent procurement process, clear scope, and feasibility study. On the other hand, the five factors that ranked last were as follows: clear stakeholder roles, stable macroeconomic conditions, existing social programs, guarantors, and political will. The study also found that there were statistically significant differences in how developers and investors rated CSFs. In addition, there are three main categories of CSFs: effective feasibility studies, financial and technical considerations, and political will and approval.

Hasan et al (2022) examined socially responsible investment (SRI) sukuk as an alternative financing for post-COVID-19 development projects. COVID-19 has disrupted economic development in both developed and developing countries. In addition to stimulus packages to adjust to the economic shock of COVID-19, regulators around the world are also looking for innovative mechanisms to rebuild economies. The research identified the need for greater transparency in SRI-financed PPP projects. In addition, organizational and legislative challenges limit the attractiveness of SRI Sukuk as a financing mechanism for post-COVID development projects.

CONCLUSION

This study aims to determine the extent of the development of research on the theme of "Islamic Social Investment" in the world. The results of the study show that the number of research publications related to "Islamic Social Investment" is 309 Scopus indexed journal articles. Furthermore, based on the results of the analysis on bibliometric author mapping, it shows that Ahmed A; Mertzanis C; and Stumpfegger E are the authors who have published the most on the theme of "Islamic Social Investment". Furthermore, in the development of research related to "Islamic Social Investment" based on bibliometric keyword mapping, it is divided into 7 clusters with the most used words are country, Islamic bank, performance, investor, value, institution, international economics, risk, sukuk, and waqf. Based on frequently used keywords, it can then be grouped into 7 research map clusters with topics that discuss Islamic Finance and Responsible Investment, Corporate Governance & Islamic Social Investment, Financial Cooperation & Islamic Social Investment, Waqf & Islamic Social Investment, Fintech & Islamic Social Investment, Economic Growth & Islamic Social Investment, and Covid-19 & Sustainable Islamic Social Investment. For future bibliometric studies on this topic, the study can use Biblioshiny-R tool for more comprehensive results (Maulida & Ali, 2023; Nuraini & Jazil, 2023; As-Salafiyah & Rusydiana, 2022; Antonio et al., 2021).

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