# A bibliometric analysis of research on zakat: Past trends and future directions

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*Abstract*

*Zakat is a part of Islamic social finance that aimed at social purpose and has been recently received attention from researchers globally. Therefore, the study aimed to explore the current state of zakat literature, identify the bibliometrics in the field, and provide future research direction. To achieve this goal, this study utilised bibliometric analysis using VOSviewer software. The documents were extracted from the Scopus database on 5th March 2021 with the search keyword Zakat and its variations. The result showed 635 documents in 267 journals and revealed approximately 1289 authors. The papers came from 53 countries and 160 affiliations roughly. Based on co-occurrence, the analysis identified 1488 keywords and the word zakat, Islam, Malaysia, Poverty, and zakat institution as the top five frequent keywords. The study also revealed the current trend of zakat studies related to education, performance, SME, and compliance. The most important of this study, seventeen zakat issues, were provided for future research agenda. Henceforth, the following research might focus on this study's suggestions to enrich and enhance zakat literature.*

## Introduction

Researchers' attention to *zakat* has increased sharply (Ab Rahman et al., 2021). Research on the *zakat* area does not only dwell on *fiqh* issues. However, it has penetrated the role and function of *zakat* in the economy. For example, some recently examined *zakat* in overcoming poverty (Y. Aziz et al., 2020; Bouanani & Belhadj, 2020; Kousar et al., 2021), *zakat* and education (Mat

Isa et al., 2019; Radzi & Kenayathulla, 2017; Raies, 2020), on the performance of *zakat* organisations (M. A. Aziz et al., 2018; Hanifah & Nurzaman, 2019; Nahar, 2018; Wahyuni-TD et al., 2021; Widyaningsih et al., 2019), *zakat* accounting (Ashraf & Rauf, 2020; Doktoralina et al., 2018; Gantira Mira et al., 2020; Hasiara et al., 2019; Kadir et al., 2019), and others. Through the rapid development of *zakat* research, there is a growing need to develop an in-depth evaluation of the scope and research area, solidify *zakat* theory, and the role of *zakat* in the economy.

In the last few years, the research on bibliometric analysis of Islamic economics and finance has been growing significantly. Likewise, research in *zakat* area specifically increased. Some do research generally focused on the area of the development of *zakat* literature (Ab Rahman et al., 2021; Alshater et al., 2021; Johari et al., 2014; Yusuf & Yerima, 2020), and more specifically on *zakat* accounting (Uyob, 2020), *zakat* and technology (Nailah & Rusydiana, 2020), *zakat* in ASEAN (Niswah et al., 2020), and *zakat* in Indonesian journals (Firmansyah et al., 2020).

Although there have been several studies related to the bibliometric analysis of zakat studies, it still offers significant gaps for further research. This paper tried to explore the part that has not been discussed in detail. Therefore, this paper differs from those previous studies in several ways. Firstly, this study re-examines previous studies (Ab Rahman et al., 2021; Alshater et al., 2021; Yusuf & Yerima, 2020) with more precise keywords in finding the articles. Second, this research will disclose the emerging trends of research based on keyword occurrences. In this context, a detailed analysis of the research keywords will contribute to a meticulous evaluation of the different fundamental aspects of the scientific landscape in *Zakat* studies. This study might be the comprehensive one that explores and focuses on keyword analysis. In contrast, earlier studies have no or less attention to keyword analysis to provide suggestions for future research agendas. Providing an overview of the distribution or the map of keywords on *zakat* literature will facilitate the researcher to determine what the following issues need further investigation.

Therefore, this study aims to examine and map the current state of *zakat* studies in the global research world to reveal a new topic for future research direction. More specifically, this study addresses the following research questions:

> *RQ1: How is the scientific distribution and production of zakat studies?*
> *RQ2: Who are the most influential authors on zakat studies?*
> *RQ3: Which are the most influential documents on zakat studies, and what is the intellectual structure of the knowledge base?*
> *RQ4: What is the trend of research based on the co-occurrence of keywords?*
> *RQ5: What are the future research directions in the field of zakat?*

Henceforth, the rest of the paper is constructed as follows. Section 2 briefly describes the literature related to *zakat* literature Section 3 explains the research method. Section 4 offers the result of the study, which has a general statistic of the articles, the influential aspects of *zakat* literature, and the visualisation of the bibliometric analysis. The focus of this result is to present keyword analysis for future research agendas. Finally, section 5 offers the conclusion of the study.

**Literature Review**

*Zakat* studies are multidisciplinary studies and are associated with socio-economic phenomena. The zakat studies need to be evaluated regarding the role and the benefit of human life. One of the best tools is using bibliometric analysis to measure the extent to which research on zakat has been achieved. Regarding zakat studies, there are several bibliometric analyses of *zakat*

literature. For example, Johari *et al.* (Johari et al. 2014) statistically analyse *zakat* literature's development. Based on Google scholar between 2003-and 2013, they retrieved 108 documents related to *zakat* studies. One of the results is that the study on *zakat* revolved around four subject areas: management, collections, distribution, and poverty. Similarly, Rusydiana and al Farisi (2016) examined 100 selected articles of zakat from 2011 to 2015. They found that zakah literature is dominated by the analysis of zakah institution, distribution of zakah, zakah management, poverty, and zakah collection, respectively.

Surprisingly these last few years, the study focused on bibliometric analysis of the development of *zakat* literature is increasing. Yusuf & Yerima (2020) adopted Scientometrics analysis to evaluate development in *zakat* publications. This study examined approximately 409 documents and discovered a diverse trend in the literature citation based on authorship and published date. Moreover, most of the publication is discovered in Asian regions. However, this study did not pay attention to keywords analysis, where keywords analysis is one of the essential aspects of finding out the direction of current research and providing any suggestions for future research. Niswah, Marlina, & Rahayu (2020) specifically studied *zakat* in ASEAN Region. Based on Google scholar, they found 115 documents. The result showed *that zakat* research is primarily conducted in Malaysia. The most cited publication is "Motivations of Paying *Zakat* on Income: Evidence from Malaysia". On keywords analysis, this study mapped the keywords into 19 clusters, meaning that the research has a varied study area. However, this study did not elaborate more on how and what the impact of these keywords map to future search agendas.

Furthermore, Uyob (2020) specifically examined *zakat* accounting literature to 35 articles in Scopus and Google scholar databases. It stated that research in this field has been increasing and published from 2011 onwards. This study is very useful in identifying the main trends and future gaps but did not provide any research topics for the future direction of the research in the *zakat* accounting area.

Firmansyah *et al*. (2020) explored and examined the *zakat* literature in the Islamic economics journals published in Indonesia. They found 280 articles within 6 journals that related to *zakat*. The maps based on co-occurrence keywords and titles show that *zakat* is a less popular topic in Islamic economics journals in Indonesia. Once again, it seems the keywords are not standardised, which leads to the wrong analysis of the co-occurrence of keywords. Other research conducted by Nailah & Rusydiana (2020) studied zakat's development and trend map and technology. More than 440 publications of indexed research publications were analysed and processed using the *R Biblioshiny* application program to find out the bibliometric map of the development of *zakat* and technology. The result showed that the number of publications significantly increased. The highest number of document types are journaled articles, the most popular authors are Timur Kuran, and the most popular keyword topics are *zakat*, Islamic, and Indonesia. Once more, the keywords of this study are also not standardised well. Unfortunately, the study did not provide any research topics for future research agendas.

Ab Rahman *et al*. (2021) did a recent study on *zakat* literature. Based on the Scopus database, they simply searched the word "zakat" which discovered 493documents (492 in the abstract). Unfortunately, it seems to be an inconsistency between retrieved data from the search and the discussion of the results. In the method, it is clearly stated that the research is limited to only five journals which are only 63 documents. However, instead of focusing on these 63 documents, they more focused on all documents which leads to confusion. For instance, they described all documents of zakat (493) for the publication trends (fig.1), demography of countries (fig. 5), types of publication (fig.6), subject area (fig. 6), and even keyword analysis (fig.9). In analysing the emergence of keywords, they did not discuss further the possibility of future research. In addition, keywords are not standardised well, consequently, the keyword

mapping was not mapped optimally, thus affecting the analysis results. Likewise, Apriliyah (2021) examined 87 selected articles from 2009-2020 indexed by Scopus, with SJR ranking Q1, Q2, and Q3. She found that the studies focused on implementing zakat in alleviating poverty, zakat compliance, and zakat distribution.

More recently, Alshater et al. (2021) analysed 224 selected documents from the Scopus database using *RStudio* and *Vosviewer* which the word "zakat" appeared in the title only. As in previous studies, they are analysed, such as the co-authorships, citations, and keywords analysis. However, looking into the keyword analysis, they did standardise the keywords such as *zakah* and *zakat* are separated even though both are the same word. However, this study is valuable and differs from the previous ones. They provided not only a bibliometric analysis but also offered suggestions for future research summed up from the gaps and suggestions from previous researchers.

**Methodology**

This study is quantitative that will use bibliographic metadata. This study will use all accessible metadata of the documents such as articles, conference proceedings, books, or book chapters and reviews. The metadata was retrieved from the Scopus database on 5th March 2021. To achieve the goal of this study, some steps are encapsulated as follows.

First is defining keywords to retrieve the necessary metadata from the Scopus database. The search is limited to the specific term of keywords that appear in the title, abstract, and author's keywords. The search string is as follows: *"TITLE-ABS-KEY (zakat OR zakah OR ziswaf)"*, which yields 635 documents. This research does not restrict to certain articles aiming to gain a broader picture of zakat literature.

The second step is filtering and screening the data. This step is to check the consistency and reliability of the data, such as the lack of consistency in the names of the author's keywords, institutions, nations, and others (Zaby, 2019). Therefore, standardisation such as this problem is needed to ensure the accuracy of the result. In the current study, for example, the keywords "*zakah*" and "*Zakat*" merged as "*Zakat*", and "Islamic banking" and "Islamic bank" merged as "Islamic bank".

Then, the last step is a bibliometric analysis using VOSviewer software developed by the Centre for Science and Technology Studies (Leiden University, Leiden, the Netherlands). This software helps the most critical task of bibliometric mapping. The current study utilised the software to create different co-authorship, citation, and co-occurrence of keywords analyses. Finally, content analysis of co-occurrence of keywords was useful to figure out the future research agenda.

**Results and Discussion**

This section will answer the five research questions above, such as the current state of *Zakat*, the productive aspect of the *zakat* study, the most influential authors and documents, the co-occurrence of keywords analysis, and the research agenda respectively.

*Scientific production of zakat literature*
*Yearly trends of zakat literature*
The result showed 635 documents related to the *zakat* topic. The first document that appeared was a book review of *The Law and Philosophy of Zakat: The Islamic Social Welfare System*, authored by A. Z. Abbasi, 1960. The book was reviewed by R. Marston Speight ("Book Reviews," 1964) and published by the *Muslim World Journal*. Figure 1 shows the yearly distribution of the articles from 1964 to March 2021. Although the database related to *zakat* has been documented since the 1960s, it was only since 2006 that *zakat* research began to increase gradually.

Then, since 2010, publications related to *zakat* have rapidly increased and reached a peak in 2019, reaching 107 documents. Additionally, this result had a similar output trend to Yusuf and Yerima (2020), although different in the number of documents. The figure showed that the *Zakat* area's study attracted researchers worldwide. Furthermore, of the document type, 468 or 73.7% of the documents is released in research articles, then followed by conference papers (n=61; 9.6%), book reviews (n=49; 7.7%), review (n=40; 6.3%), book (n=8; 1.3%), conference review (n=8; 1.3%), and editorial (n=1; 0.2%).
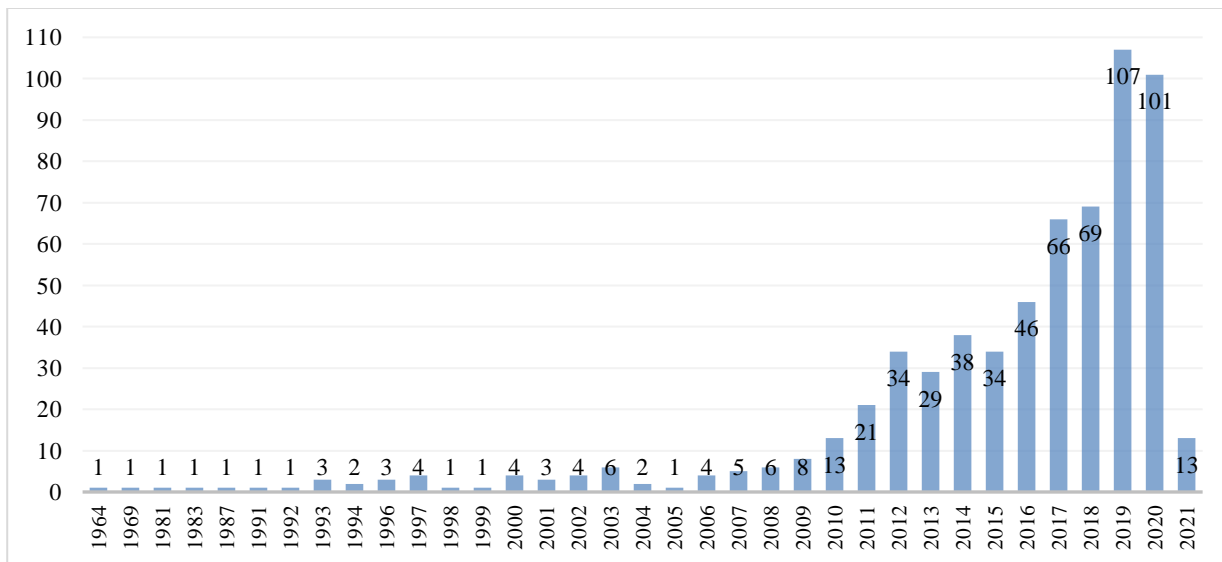


Figure 1. Yearly distribution of published *zakat* literature

*Distribution of zakat literature based on subject areas*
*Zakat* literature was distributed in 25 sub-topic areas. Of 635 documents, 65% of papers are scattered in 5 subject areas. Social Sciences is the greatest number of publications with 247 or 22% of papers. It is followed by Economics, econometrics, and finance (n=206; 18%), business, management, and accounting (n=193; 17%), arts and humanities (n=161;14%), and computer science (n=63; 6%).
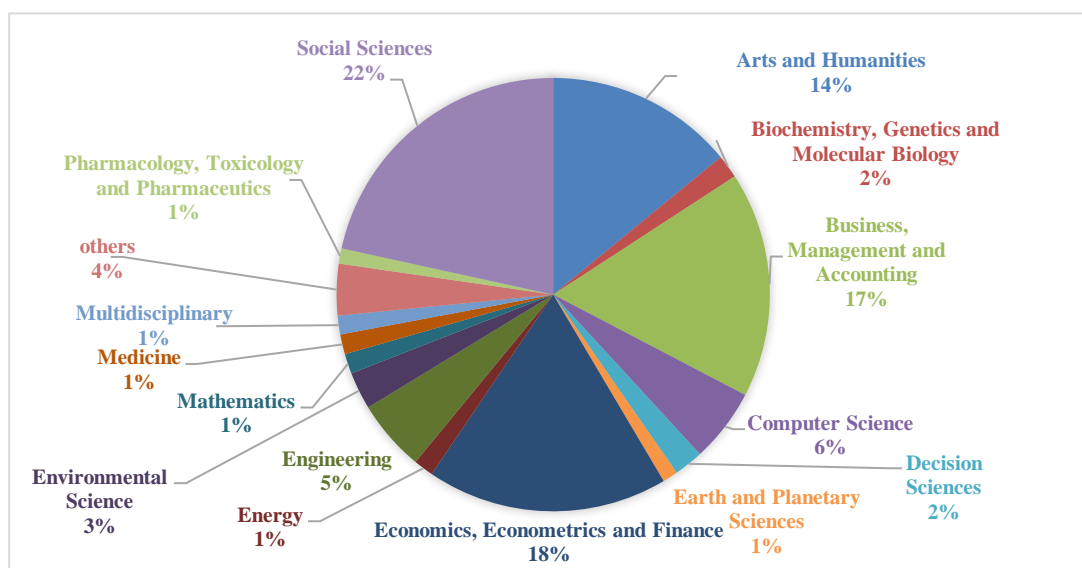


Figure 2. Distribution of articles based on the subject areas

*Analysis of the productive journals, authors, affiliations, and countries*
*The most productive journals*
Vosviewer recorded two hundred ninety-seven journals. Interestingly, 207 (32 %) of 635 documents were published under these 21 journals (n=21 or 7.9%), while the rest were scattered throughout 246 journals or sources of the title. The highest number of articles was published in the *Journal of Islamic Accounting and Business Research* and *the International Journal of Islamic and Middle Eastern Finance and Management*, with 18 articles each. Then followed by the *International Journal of Innovation, Creativity, and Change* (n=13), and *Journal of King Abdulaziz University, Islamic Economics* (n=13), shadowed by *Journal of Critical Review* (n=12), and *Jurnal Pengurusan* (n=11). The other productive journals with the highest publications are shown in figure 3.
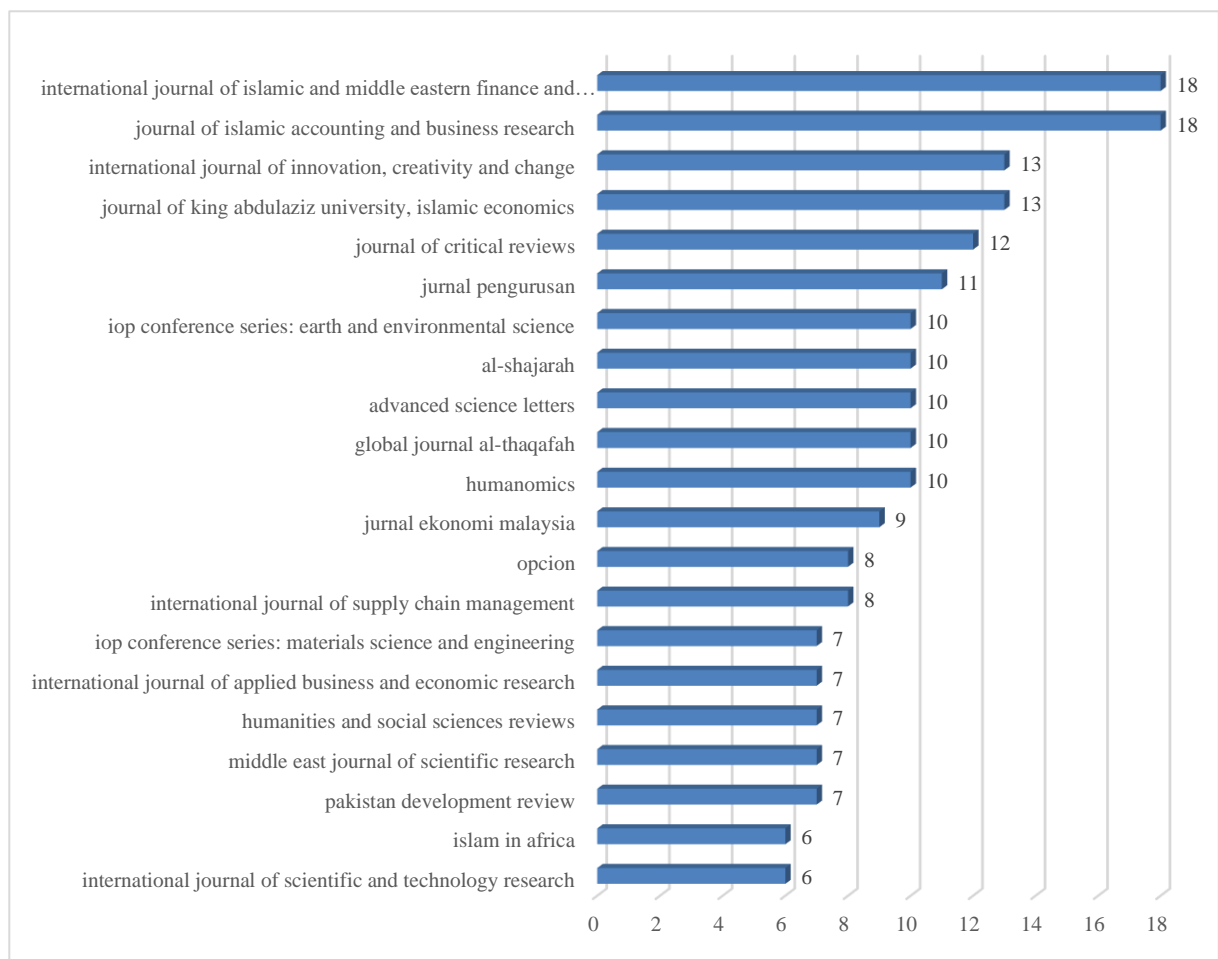


Figure 3. The most productive journals based on articles' publication

Based on the citation, the *Islamic Accounting Business Research journal* is the highest cited journal with 144 citations over 18 articles. Then, followed by the *International Journal of Islamic and Middle Eastern Finance and Management* (n=115 citations/18 articles), *Journal Pengurusan* (n=96 citations/11 articles), *Humanomics* (n=79 citations/10 articles), *Global Journal al-Thaqafah* (n=44 citations/10 articles), and *Jurnal Ekonomi Malaysia* (n=42 citations/9 articles).

*The most productive authors, affiliations, and countries*
According to Vosviewer, there are 1289 authors and 53 countries of 635 documents. Furthermore, the Scopus refined database showed that authors from approximately 160 institutions. Table 1 shows Zakat's papers' most productive authors, institutions, and countries. Firstly, Saad is the most productive author with 16 documents, then followed by Ahmad (n=8), Johari (n=7), Sawandi (n=6), and Wahab (n=6), and Wahid (=6).

Table 1. The most productive authors and countries based on total articles

| Author Name | Articles | Affiliation | Articles | Country | Articles |
|---|---|---|---|---|---|
| Saad | 16 | Universiti Utara Malaysia | 57 | Malaysia | 256 |
| Ahmad | 8 | International Islamic University Malaysia | 41 | Indonesia | 156 |
| Johari | 7 | Universiti Teknologi MARA | 38 | United Kingdom | 34 |
| Sawandi | 6 | Universiti Kebangsaan Malaysia | 36 | Saudi Arabia | 30 |
| Wahab | 6 | Universiti Sains Islam Malaysia | 22 | United States | 30 |
| Wahid | 6 | Universitas Indonesia | 17 | Pakistan | 29 |
| Abdul-Jabbar | 5 | Universiti Sains Malaysia | 16 | Nigeria | 14 |
| Aziz | 5 | University of Malaya | 16 | Australia | 12 |
| Bin-Nashwan | 5 | Universitas Airlangga | 15 | India | 11 |
| Doktoralina | 5 | Universiti Teknologi Malaysia | 11 | UAE | 11 |
| Ismail | 5 | Universitas Islam Negeri Syarif Hidayatullah Jakarta | 11 | Bahrain | 8 |
| Shaikh | 5 | IIUM, Institute of Islamic Banking and Finance | 10 | Russian Federation | 8 |
| Zakaria | 5 | King Abdulaziz University | 8 | Jordan | 8 |
| Bahari | 4 | Universiti Malaysia Terengganu | 8 | Brunei Darussalam | 7 |
| Bidin | 4 | Universiti Sultan Zainal Abidin | 7 | Bangladesh | 7 |
| Farouk | 4 | Universitas Mercu Buana | 6 | Germany | 6 |
| Latief | 4 | University of Bahrain | 5 | Morocco | 6 |
| Lubis | 4 | Universiti Tenaga Nasional | 5 | Yemen | 6 |
| Mohamad | 4 | Universitas Negeri Semarang | 5 | Oman | 5 |
| Mohd ali | 4 | Universiti Malaysia Perlis | 5 | Thailand | 5 |
| Mukhibad | 4 | Universitas Muhammadiyah Yogyakarta | 5 | Turkey | 5 |
| Nurzaman | 4 | INCIEF | 5 | New Zealand | 4 |
| Rahman | 4 | | | Switzerland | 4 |

Secondly, based on affiliations, Universities from Malaysia were the top four institutions publishing zakat literature. The highest productive is University Utara Malaysia with 57 documents then, followed by International Islamic University (n=41), University Technology MARA (n=38), University Kebangsaan Malaysia (n=36), and University Sains Malaysia (n=22). At the same time, the fifth productive affiliation from Indonesia was university Indonesia (n=17). Interestingly, the International Islamic University Malaysia and IIUM, the Institute of Islamic Banking and Finance, have the same institutions as International Islamic

University Malaysia (IIUM). Third, the most productive countries were the Malaysia (n = 256), Indonesia (n= 156), United Kingdom (n= 34), Saudi Arabia (n= 30), United States (n= 30), and Pakistan (n= 29), which collectively released roughly 74.9%.

Furthermore, the documents came from 53 countries, and 32 have connected. The node stood for the total link strength of the countries. As shown in figure 4, likewise the most productive country, Malaysia is the centre of the collaboration with the biggest link strength of 75 scattered among 20 countries. Then followed by Indonesia (n=29, 6), Saudi Arabia (n=19, 11), United Kingdom (n=13, 8), and Nigeria (n=12, 4). Moreover, the biggest collaborations are between Indonesia and Malaysia with 23 collaborations, followed by Malaysia and Nigeria (n=9), Malaysia and Saudi Arabia (n=6), Malaysia and United Kingdom (n=5), Malaysia and Yemen (n=5), and Malaysia and Bangladesh (n=4). Interestingly, even though Germany and Morocco, with 6 documents respectively, and Switzerland (n=4) are included in the list of productive countries, they have no collaborations with other countries.
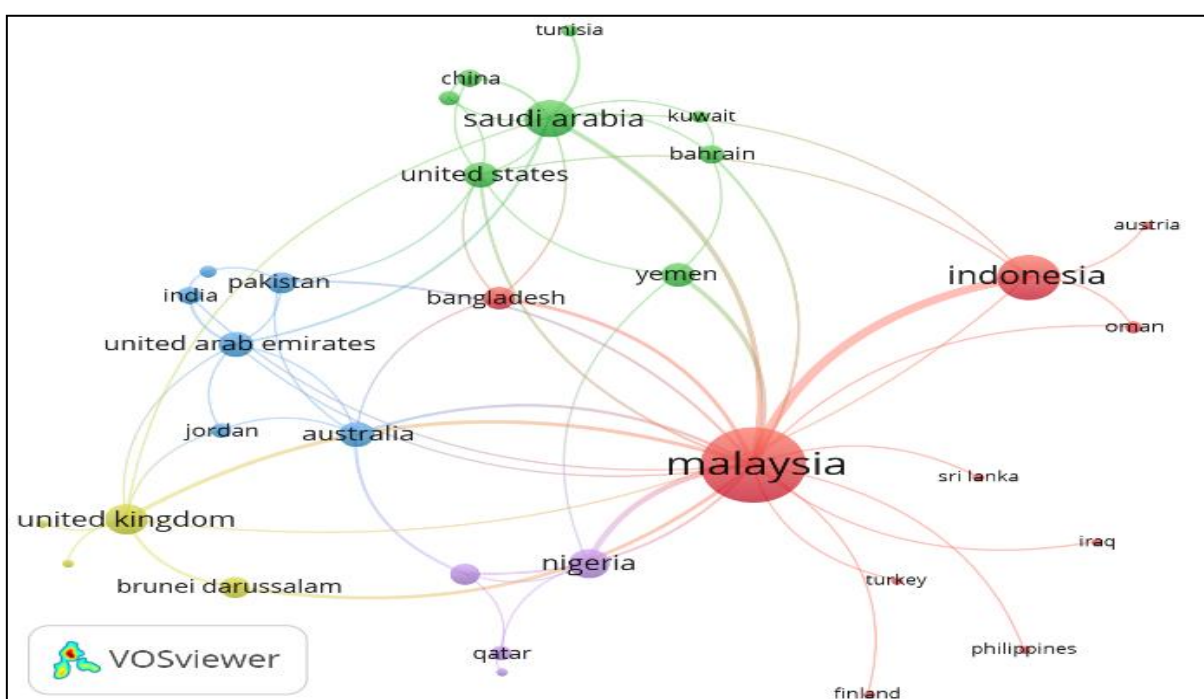


Figure 4. Co-authorship mapping based on countries' link strength

*Analysis of the influential authors and documents*
One of the unique features of VOSviewer is the ability to show scholars and documents that have influenced the discourse within a discipline. This study used citation analysis to reveal and figure out the influential authors and documents in the zakat area. Based on VOSviewer analysis, there are 1289 authors over 635 documents.

First, table 2 lists the most influential authors based on the number of Scopus-indexed citations. The top five authors based on total citations are Haniffa (n=224), Hudaib (n=199), Casson  (n=174), Maali (n=174), and Napier (n=174). If we compare table 1 and table 2, the most productive authors are not necessarily the most influential authors. Only three were among the most productive authors listed as the most influential (table 2). Based on table 2, Saad as the most productive author, only ranked 11th, followed by Wahab, and Bidin  ranked 7th and 12th, respectively.

Second, of 635 documents, 354 documents have been cited by other articles, and only 18 documents have been cited at least 30 times. Table 3 lists the most often cited documents by the number of Scopus citations. Interestingly, the top 2 articles did not directly address the *zakat*

as the main topic. However, the *zakat* is only a complementary topic and the final suggestion of their research results.

Table 2. The influential authors based on the Scopus-indexed citations

| Author | Citations | Documents |
|---|---|---|
| Haniffa | 224 | 2 |
| Hudaib | 199 | 1 |
| Casson | 174 | 1 |
| Maali | 174 | 1 |
| Napier | 174 | 1 |
| Scott | 101 | 1 |
| Wahab | 78 | 6 |
| Salim | 75 | 1 |
| Zaid | 66 | 3 |
| Benthall | 63 | 2 |
| Saad | 62 | 16 |
| Bidin | 55 | 4 |
| Kuran | 52 | 3 |
| Abo Hussain | 51 | 2 |
| Al-Ajmi | 51 | 2 |
| Kochuyt | 50 | 1 |
| Al-Krenawi | 49 | 1 |
| Graham | 49 | 1 |
| Khan | 44 | 2 |
| Dean | 43 | 1 |

Table 3. The most influential documents based on citations

| Document | Topic | Citations |
|---|---|---|
| Haniffa (2007) | Ethical disclosure in Islamic Banks | 199 |
| Maali (2006) | Social Reporting in Islamic Banks | 174 |
| Scott (1987) | Comparative studies between *Zakat* and Cristian Tithe | 101 |
| Salim (2008) | Islamization of Law in Indonesia | 75 |
| Benthall (1999) | *Zakat* is a religious teaching and actual practice in Jordan and the west bank | 58 |
| Kochuyt (2009) | *Zakat* dan solidarity to help the poor | 50 |
| al-Krenawi (2000) | Social work practice in Muslim society | 49 |
| Dean (1997) | The significance of *Zakat* concerning the Islamic welfare state | 43 |
| Wahab (2011) | The Efficiency and Governance of *zakat* institutions | 42 |
| Metwally (1997) | The economic consequence of applying Islamic principles such as *zakat* | 41 |
| Buehler (2008) | The rise of shariah Law in Indonesia | 41 |
| Aribi (2011) | Narrative disclosure of corporate social responsibility in Islamic financial institutions | 39 |
| Kuran (2003) | Islamic redistribution through historical zakat record and modern realities | 36 |
| Fauzia (2013) | Faith and the state: A history of Islamic philanthropy in Indonesia | 35 |
| Rosli (2018) | Distribution management of *zakat* fund for *asnaf riqab* in Malaysia | 35 |
| Bidin (2009) | The influence of compliance behaviour on zakah giving | 32 |
| Mohit (2011) | Social housing through *Zakat* (Selangor *zakat* board) | 31 |
| Al-Ajmi (2011) | Role of *Zakat* in the corporate dividends' decisions | 30 |

Figure 5. revealed first, the topic of research on *zakat* is distributed into 20 clusters means the *zakat* studies are not monotonous on one topic but have varied. Furthermore, figure 5 shows that of the 635 articles, 248 are connected to the others, while the rest are unconnected. However, it could also be possible that the inability of the researchers to access these articles, which we know is access most of them, is payable.
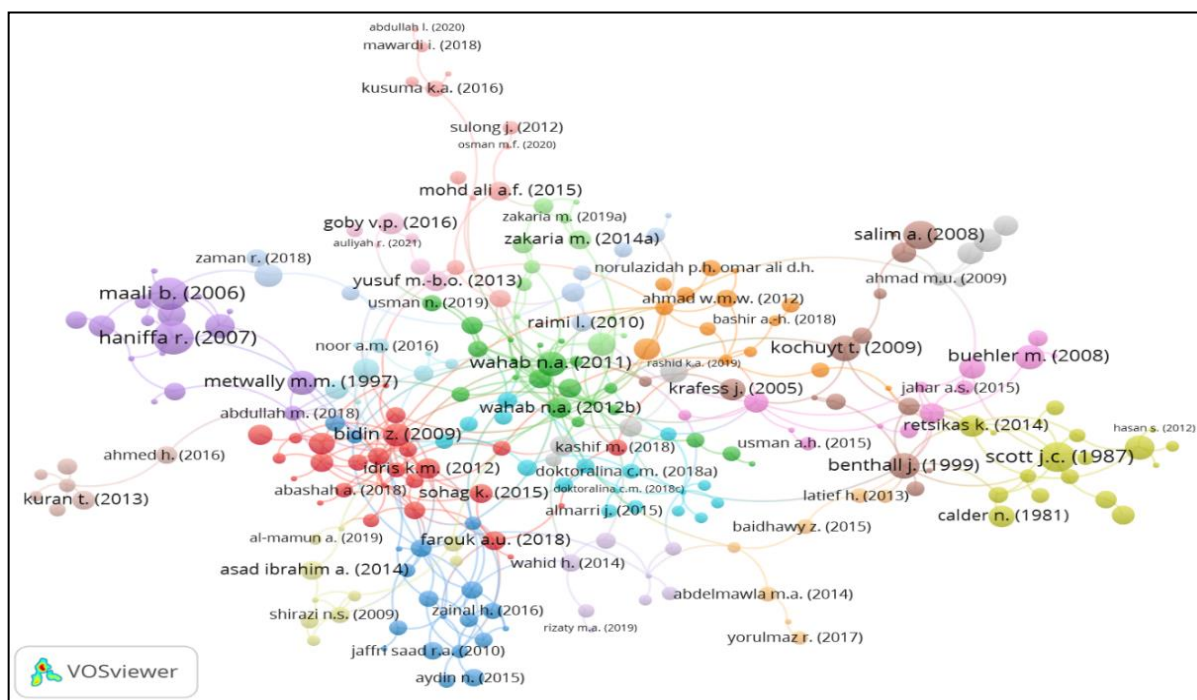


Figure 5. Visualisation of articles based on citation analysis

*Co-occurrence of keyword analysis*

This section focused on the content study by analysing keywords' cluster distributions and co-occurrence map. From 635 documents, this study obtained approximately 1488 keywords. Among them, 1,187 (79.8%) occurred only once, followed by 301 (20.23%) keywords that appeared twice, and only 147 (9.9%) keywords showed 3 times or more. Additionally, this study also found that 131 documents do not have keywords, and 22 of these documents do not have abstracts.

The study visualised and mapped the 147 keywords, as shown in Figure 6. First, based on Figure 6, the node and word sizes denoted the weights of keywords. The keyword zakat has the most significant node representing the frequency occurrence 205 times. Then, it is followed by other keywords with a big node and high frequency, such as Islam (37), Malaysia (31), poverty (27), and zakat institution (27).

Then the line and its thickness between the nodes showed that the two keywords had occurred simultaneously. The most often keywords that appeared together are *zakat* and *waqf*, with the appearance 22 times simultaneously. Then it followed by *zakat* and Islam (17), *zakat* and Malaysia (15), *zakat* and *sadaqah* (15), *zakat* dan poverty (14), *zakat* and poverty alleviation (9), *zakat* and *shariah* (9), *waqf* and *Sadaqah* (9), *zakat* and CSR (8), *zakat* and Indonesia (7), *zakat* and *mustahiq* (7), *zakat* and *asnaf* (7). In addition, based on figure 6, it is easy to realise that, for example, the connections between *zakat* and Malaysia implied the close investigation of *zakat* practice in Malaysia. Then, the relationships between *zakat* and *zakat* institutions, efficiency, accountability, and service quality indicated that the study of *zakat* performance is needed to evaluate the *zakat* institutions. Subsequently, the relationships

between *zakat* and poverty and poverty alleviation showed the importance of *zakat* in eradicating economic inequality.

Furthermore, the distance between the nodes showed the strength of the link between the two nodes. As the most frequent keyword, Zakat appeared in the documents as the highest strength with a total link strength of 390. Then followed by Islam (93), Waqf (72), Malaysia (60), *sadaqah* (60), Poverty (47), Islamic banks (41), religion (41), and *zakat* institutions (40), and Poverty alleviation (39). Lastly, the color of the nodes showed that they have the same cluster.
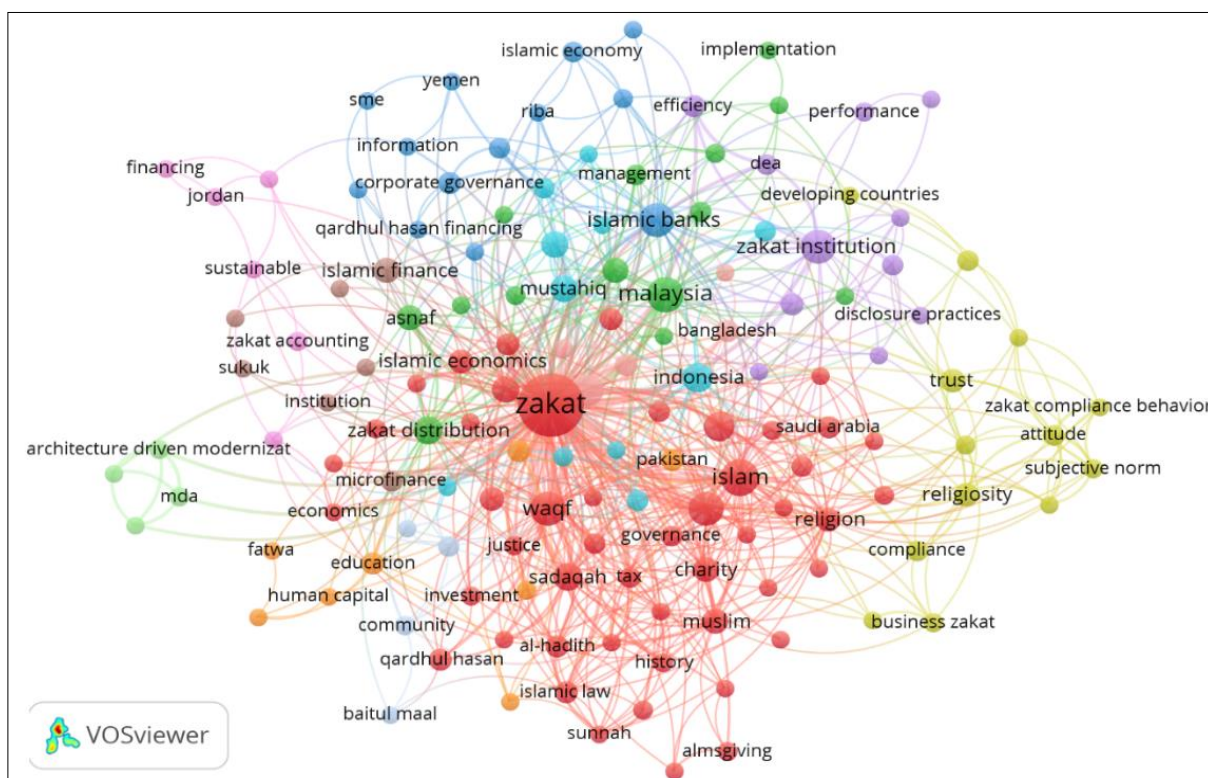


Figure 6. Co-occurrence map of keywords for the *Zakat* literature

Second, regarding the cluster, VOSviewer divided the keywords of *Zakat* literature into 12 clusters. The first cluster (red; 49 keywords) focused on *zakat* related to poverty, CSR, and Waqf. The second cluster (Green; 14 keywords) showed links to Management of *zakat* with the main keywords such as *zakat* management, *zakat* distribution, *zakat* collection, *zakat* distribution, Management, and regulation. Cluster 3 (blue; 13 keywords) addressed the shariah compliance of *zakat* with the main keywords such as corporate governance, shariah supervisory board, and *qardhul hasan* financing. Cluster 4 (yellow; 14 keywords) concentrated on *zakat* behaviour with keywords such as *zakat* compliance behaviour, compliance behavior, planned behaviour, theory of reasoned action, religiosity, intention, and attitude.

Cluster 5 (purple; 11 keywords) focused on performance analysis of *zakat* institutions with the keywords such as accountability, disclosure practice, performance, reputation, service quality, and efficiency. Cluster 6 (light blue; 11 keywords) focused on *zakat* and *Maqashid shariah* purpose with keywords such as GDP, Islamic philanthropy, Dompet Dhuafa, and *Mustahiq*. Cluster 7 (orange; 8 keywords) is associated with education, fatwa, human capital, human development, and welfare. Cluster 8 (brown: 8 keywords) focuses more on Islamic finance and fiscal policy. Cluster 9 (violet; 6 keywords) related to *zakat* and financing for the

higher education system. Cluster 10 (pink; 5 keywords) concentrated on Islamic microfinance, Islamic social finance, poverty alleviation, and sustainable development. Cluster 11 (light green; 4 keywords) focused on IT, such as *zakat* calculation and ZCM generator. Lastly, cluster 12 (powder blue; 4 keywords) linked to *baitul mal*, social welfare, and well-being.

*Emerging trends and futures research direction*

This section is the most important for the next future research agenda related to *zakat* knowledge. First, this section will show the emerging trends of research based on the overlay visualisation of the keywords. Based on the visualisation and mapping of the co-occurrence of keywords, the analysis showed how the trends and the development of *zakat* literature are. Figure 7 gave an overlay visualisation of keywords based on the yearly distribution for the last six years. The color of the node stood for the year of keyword appearances. Figure 7 clearly shows the latest keyword that appeared in the latest *zakat* articles focused on education, performance, SME, and compliance.
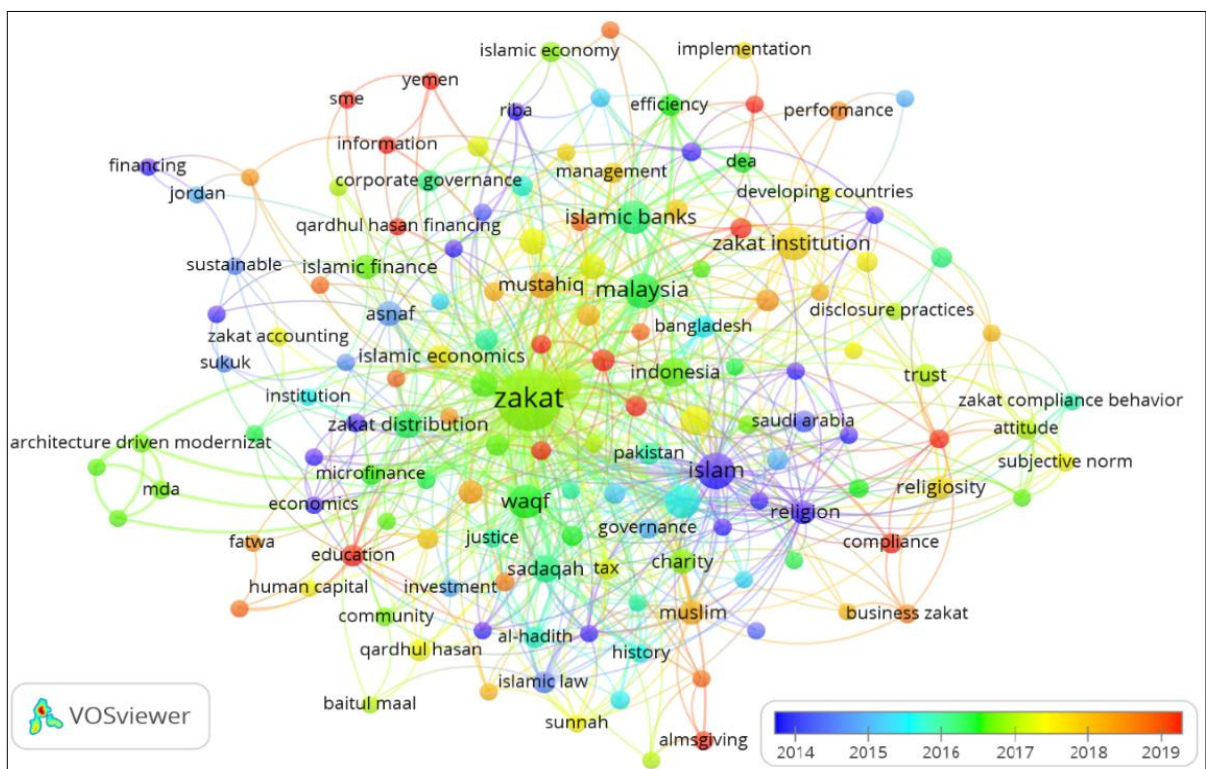


Figure 7. Trend of keyword's co-occurrence analysis

Second, as one of the main aims of this research, it will supply several topics for future research based on cluster analysis. From figure. 5, the visualisation of keywords showed 12 clusters. It is quite clear that the study of *zakat*, *waqf*, and *sadaqah* is mainly related to poverty. Based on the co-occurrence of keywords analysis, the study discovered and provided at least seventeen research topics to enhance and develop a solid knowledge of *zakat* literature. Table. 4 shows the list of the topic for future research agendas based on the clusters or research streams.

Table 4. Summary of topics for future research agenda based on cluster analysis

| Research Stream | No | Future Research Agendas |
|---|---|---|
| Cluster 1 (Red) | 1 | To examine the role model of the *zakat* distribution program for poverty alleviation. |
| | 2 | To develop an integrative model of *zakat*, waqf, and another sadaqah as an effective program for poverty eradication. |
| Cluster 2 (green) | 3 | To examine the management of *zakat* distribution among the *asnaf* |
| | 4 | To examine the distribution of *zakat,* especially for *mualaf* (embraced to Islam) empowerment program. |
| Cluster 3 (Blue) | 5 | To analyse the role and the significance of the *Shariah* supervisory board to ensure *zakat* compliance. |
| | 6 | To analyse the impact and the compliance of *qardhul hasan* financing of *zakat* |
| Cluster 4 (Green) | 7 | To explore and identify the behaviour and intention of *muzakki* in paying *zakat.* |
| | 8 | To examine the *zakat* compliance based on the *muzakki* perspective |
| Cluster 5 (Purple) | 9 | To measure and develop a framework for the efficiency and performance index of *zakat* institutions. |
| | 10 | To highlight and measure the accountability of *zakat* institutions |
| Cluster 6 (Light blue) | 11 | To examine the achievement of *maqashid shariah* of *zakat* from the macro perspective. |
| Cluster 7 (Orange) | 12 | To analyse the human capital development of *amil* |
| Cluster 8 (Brown) | 13 | To examine the role of *zakat* related to fiscal policy |
| Cluster 9 (violet) | 14 | To develop a framework of the *zakat* distribution for higher education financing. |
| Cluster 10 (Pink) | 15 | To analyse the role of *zakat* for sustainable development through Islamic microfinance and Islamic social finance |
| Cluster 11 (Light green) | 16 | To develop a digitalisation program for *zakat* collection, distribution, and utilisation of big data for analysis. |
| Cluster 12 (Powder blue) | 17 | To develop a role model of *zakat* for social well-being and social welfare. |

**Conclusion**

This study contributes to the current research by providing information on the current state of *zakat* literature and identifying the trends and the opportunities for future research through analysing the content in this research field. This research uncovered some interesting results concerning the *zakat* literature, which can be encapsulated as follows:

*First*, the *zakat* literature stagnated at a low level during the initial until 2005, then gradually increased up to 2009. Since 2010, the number of publications in the *zakat* area has proliferated. The publication distributed up to 25 sub-topic areas, but 65% of them are on the 5 subject areas related to economics. *Second*, most authors published 18 articles. There are approximately 267 journals. However, almost one-third of publications were published in the top 21 journals. Furthermore, the most affiliation is University Utara Malaysia, and the productive country is Malaysia. *Third*, the influential author is Haniffa R. The influential document is on the topic of ethical disclosure in Islamic Banks. *Fourth*, keyword analysis showed that research on the *zakat* area was varied and widely scattered into 12 clusters. There are approximately 1488 keywords. However, only 147 (9.9%) appeared more than 3 times. The word zakat is the most frequent, followed by other keywords such as Islam, Malaysia, poverty, and *zakat* institution. *Fifth*, this research presented the overlay visualisation of the keywords that showed the trend of the zakat research. Moreover, the most important is that this research revealed seventeen topics for future research agenda.

Lastly, this research has several weaknesses, such as the data retrieved only from the Scopus database, which neglected other sources. Including other databases would enrich the data for analysis. Furthermore, this study only focused on keyword analysis. It would be fruitful if the following research deeply investigates the articles with a systematic literature review analysis.

**Author's Contribution**
Luqman Hakim Handoko: Writing the draft, data collection and analysis.
Ai Nur Bayyinah: Literature review, review of the draft and result discussion.
Firmansyah: Review of the draft and result discussion.

**Declaration of Competing Interest**
We declare that we have no conflict of interest.

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