Text Analytic on Halal Research

Ihsanul Ikhwan*
International Islamic University of Malaysia (IIUM)

The word “halal” experiencing developments in its application in daily life. Traditionally, halal was seen to refer only to meet and poultry, especially refer to the method of slaughter. More recently, this has grown to include non-meet foods such as baked goods, snacks, confectionery, ready-made meals and other processed food and beverage products. As halal is a ‘farm-to-fork’ process with halal compliance needed all the way through the supply chain, aspects such as warehousing, transportation and logistics all play a role in maintaining and demonstrating halal integrity. This study aims to determine the trend development and text analytic on “halal” uses a text analytic method with R tools, which processes the metadata of 884 Scopus indexed articles with the keywords with “halal” in the subject areas of Economics, Econometrics, finance (EEF), and Business, Management, and Accounting (BMA). The results of the text analysis show that the research related to “halal”, dominated by halal food and halal tourism. Further research is needed in other halal industrial sectors, namely halal pharmaceuticals, halal cosmetics, halal media, and halal fashion. This study also indicates that from object side, research documents on halal are still concentrated on several countries. Further studies need to be conducted with the case of various countries. Lastly, this paper also provide several recommendations regarding to the theme of future researchs potential about each sectors on halal industry.

Keywords: Government Recovery; Covid-19; Text Analytic; Islamic Economy
JEL Classification: C16; F68; O10

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*Correspondence:
Ihsanul Ikhwan
ihasnulikhwan1997@gmail.com

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BACKGROUND

Islamic economics shows significant development in recent years, which has established an increasingly important footing in the global economy. This development driven by the increasing of Muslim consumer demand for dedicated products and services based on Islamic law that has developed halal industry. According to State of the Global Islamic Economy report (2020), there is 7 sectors according to the halal industry, which are halal food, Islamic finance, Muslim-friendly travel, modest fashion, halal pharmaceuticals, halal cosmetics, halal media and recreation. Several countries have taken the lead in establishing robust ecosystems, with Malaysia leading this report’s Global Islamic Economy Indicator (GIEI) followed by the United Arab Emirates (UAE), Bahrain and Saudi Arabia. However, Indonesia rose from tenth place in 2018 to fifth place in 2020, driven by robust initiatives to boost economic growth through developing a dedicated Islamic economy strategy (GIEI, 2020).

As Islam is the second largest religion in the world, the halal product market is expected to grow from 1.4 trillion U.S. dollars in 2017 to around 2.6 trillion by 2024, with the largest share of the market value coming from North America. Halal cosmetics are expected to reach 54.16 billion U.S. dollars in market value by 2022. In addition, the income of Muslim countries is growing, accompanied by an increase in religious affinity/sympathy. With income that exceeds basic needs accompanied by a level of religious awareness, they demand products/services that are in accordance with Sharia principles.

There are more than 800 published scientific research papers related to “halal” internationally in the period of writing this paper, July 2021. The purpose of this study is to analyse the development of research trends regarding to “halal” in various countries, as well as to provide themes recommendation to further research, especially in each sector of halal industry. This study uses a text analytic method with R tools and processes the metadata of 884 Scopus indexed articles with the keywords of halal with subject areas of Economics, Econometrics, finance (EEF), and Business, Management, and Accounting (BMA).

LITERATURE REVIEW

In Islam, the concept “halal” also associates to the concept “Thoyyib” (good). Thus, the meaning of “halal” is anything which is permissible in Islam and good for human being. The halal practice applies to all aspects and activities of a Muslim, but it is more than just a religious obligation (Talib et al., 2015; Tieman, 2019). The word “halal” itself also experiencing developments in its application in daily life. Traditionally, halal was seen to refer only to meet and poultry, especially refer to the method of slaughter. More recently, this has grown to include non-meet foods such as baked goods, snacks, confectionery, ready-made meals and other processed food and beverage products. As halal is a 'farm-to-fork' process with halal compliance needed all the way through the supply chain, aspects such as warehousing, transportation and logistics all play a role in maintaining and demonstrating halal integrity.

During the dominance of a value-free economic system, there is a need for halal specifications in several industrial sectors. Among the various existing classifications, the classification from the Global Islamic Economy Report is the most commonly used. In the annual report, Islamic economics is defined as economic sectors whose main products/services are structurally influenced by Islamic ethics and law. According to GIER (2020), Halal Economy has 7 economic sectors: (1) halal food, (2) Islamic finance, (3) Muslim-friendly travel, (4) modest fashion, (5) halal pharmaceuticals, (6) halal cosmetics, (7) halal media and recreation.

1. Halal Food

Consumption of halal food and drink is the most basic thing for a Muslim. Lately, halal food is considered as a very growing, most profitable and influential market in the food business world. The market potential for halal food is not only growing in Muslim countries, but also non-Muslims. In 2019, the world’s consumption of halal food was recorded at $1.17 trillion, an increase of 3.1% from the previous year. It is estimated that this halal consumption will touch $2 Trillion by 2024 (GIER, 2019).

2. Islamic Finance

Islam is a comprehensive religion, which regulates all lines of human life in all fields, including economics and finance. Today, Islamic finance continues to grow and develop rapidly both. Islamic finance is also attractive to non-Muslims, both because of the services it offers and because customers want a more ethical approach to the financial sector. Islamic principles that boil down to the Qur'an and Sunnah distinguish this sector from conventional finance, especially in terms of the prohibition of interest. The total assets of the Islamic finance industry in 2019 increased by 13.9% to reach $2.88 trillion and is expected to continue to grow to reach $3.5 trillion in 2024 (GIER, 2019).

3. Modest Fashion

Islam considers the way of dress as an act of worship and obedience of a Muslim / Muslimah. Covering the genitals is an obligation in Islam. Halal fashion means dressing according to the rules of Muslim fashion, where does not form a body and is not transparent. In Islam, the dress code does not only require clothing as a cover for the body, but clothing is a complete and comprehensive means for health, decency, and environmental safety. Furthermore, Islam considers the way of dress as an act of worship and obedience of a Muslim / Muslim because it covering the genitals is an obligation. Muslim fashion shopping in 2019 is worth $277 Billion. Whereas Muslim consumer spending will grow at a 5-year CAGR estimated at 2.4%
between 2019 and 2024 reaching $311 billion in 2024 (GIER, 2019).

4. Halal Pharmaceuticals

People are becoming more aware that it is not only food that is put into the body that must be ensured to be halal, but also medicines. This awareness is also growing with modern healthcare trends that are increasingly respecting personal choice. Customers have the right to be adequately informed, and to choose the treatment according to their beliefs and ethics. This awareness growth is directly proportional to the wider halal pharmaceutical market. Halal pharmaceutical spending is worth $92 Billion or 7% of global drug spending. As halal pharmaceutical standards gain global acceptance, halal pharmaceutical spending is forecast to grow to $134 billion by 2024 (GIER, 2019).

5. Halal Cosmetics

Halal cosmetics are products made from materials that are in accordance with Islamic law. The content is free from animal elements that are forbidden and those slaughtered are not in accordance with Islamic guidance. Thus, halal cosmetics are a harmonization of Islamic law, Good Manufacturing Practice (GMP) and halal raw materials (Khanapi, et al, 2015). At the global level, the halal cosmetics industry is experiencing a good development trend. One of the reasons for this is the increasing awareness of skin care, the company's expansion, and the rising consumption of the middle class in Asia Pacific, the Middle East, and Africa. The average halal cosmetic spending increased 4.6% annually and reached $66 billion in 2019 (GIER, 2019).

6. Halal Media & Recreations

Media and entertainment are objects that cannot be separated from the daily activities of every human being. Media is a source for humans to get the information they need. While entertainment is a source for humans to get rid of boredom and fatigue after doing various activities. Current technological developments make it easier for humans to get these two objects. Media with the theme of Islam are allowed, as long as they do not make people commit sins and forget Allah. Media and entertainment in Islam are allowed, as long as they do not make people commit sins and forget Allah. Media with the theme of Islam are allowed, as long as they do not make people commit sins and forget Allah. Media and entertainment in Islam are allowed, as long as they do not make people commit sins and forget Allah. Media and entertainment in Islam are allowed, as long as they do not make people commit sins and forget Allah. Media and entertainment in Islam are allowed, as long as they do not make people commit sins and forget Allah.

7. Halal Media dan Recreation

Halal tourism is part of the tourism industry aimed at Muslims, where the services refer to Islamic rules. Halal tourism includes understanding the meaning of halal in all aspects of tourism activities ranging from hotels, transportation facilities, food and beverage facilities. The awareness of Muslims to carry out religious law requires the support of facilities and services that are in accordance with the Shari'a. The development of halal tourism has begun to be carried out by various countries, both countries with a majority of Muslims and non-Muslims. The development of halal parawasita is currently quite fast and its scope is getting wider. Currently, Muslim spending on halal tourism is estimated to be worth $194 billion in 2019 and accounts for 12% of global tourism spending. This trend is expected to grow to $274 billion by 2024 (GIER, 2019).
The review process was conducted in July 25th, 2021. Figure 1 describes the three steps in identifying research documents, including eligibility, screening, and included processes involved in the systematic review. To answer the research question, we selected some relevant keywords that align with our research. Some general statistics from the data set are presented to get an idea about good governance. All articles that meet the need of request are evaluated in the text analysis aspect.

Next, we analyzed the research document using Biblioshiny software. Biblioshiny is a free software from R environment ([CRAN, The Comprehensive R Archive Network, https://cran.r-project.org/]) that facilitates a set of tools for quantitative research in bibliometrics and scientometrics (Aria & Cuccurullo, 2017). In the bibliometric literature, the greatest concern lies in the construction of bibliometric maps. Research related the effect of differences on similarity measures (Ahlgren et al., 2003), and they were tested with different mapping techniques (Boyack et al., 2005). Lastly, the text analysis will be carried out on the results of bibliometric mapping which related to word.

**RESULT & DISCUSSION**

Table 1 presents the type of documents used in the research using 'halal' as the keywords with subject areas of Economics, Econometrics, finance (EEF), and Business, Management, and Accounting (BMA). In total, there were 884 documents classified into 6 types of documents, including journal articles (717 documents), anthology/book chapters (61 documents), conference papers (52 documents), reviews (43 documents), books (3 documents), and others (7 documents).
Based on the results in Table 1, the most widely used document types as research subjects with the keyword "halal" is journal articles with a percentage of 81.10% or 717 documents. The lowest percentages are book chapters and others, where each percentage is below 1%. Based on the type of document, it can be concluded that the references used are quite valid because most of them come from Scopus indexed scientific journals.

### 4.1. Text Analytic

Text analysis was carried out using R-studio and biblioshiny, a software developed by Massimo Aria and Corrado Cucurullo from the University of Naples and Luigi Vanvitelli from the University of Campania (Italy). Text analysis contains a deeply analyzing process by searching related words that often appear with "halal" as the keyword. This is intended to determine the development of research on "halal" and provide recommendations to further researchers.

In order to explore the results of the analysis text, this section will present a visual mapping chart of 884 documents. Analysis of keywords, abstracts, and document titles becomes the basis for mapping, along with important or unique terms contained in certain documents. Mapping is a process that enables one to recognize elements of knowledge and their configuration, dynamics, interdependencies, and interactions.

#### 4.1.1 Most Relevant Word

<table>
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<tr>
<th>No</th>
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<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Journal Article</td>
<td>717</td>
<td>81.10%</td>
</tr>
<tr>
<td>2</td>
<td>Book Chapter</td>
<td>61</td>
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<tr>
<td>3</td>
<td>Conference Paper</td>
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<td>4</td>
<td>Review</td>
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<td>5</td>
<td>Book</td>
<td>3</td>
<td>0.33%</td>
</tr>
<tr>
<td>6</td>
<td>Others</td>
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<td>156</td>
<td></td>
</tr>
</tbody>
</table>

**Table 1: Types of Documents**

Furthermore, the description of the words that appear in the abstract with the halal keyword is displayed in the form of a world tree map. Word Tree Map displays words that often appear in boxes similar to regions or regions on a map, where the more words that appear, the larger the square area. Figure 2 shows the 50 most relevant words used in the research collection related to the keyword "halal" and the subject areas of EEF and BMA.

The top word with the highest number of occurrences and the most relevant to the halal keyword is the word halal itself, with the number of occurrences as much as 170 times. Furthermore, the second and third most relevant words relate to 2 halal industry sectors: halal food and halal tourism, with 76 and 74 occurrences, respectively. This explains that research with the keyword "halal" has so far been dominated by 2 halal industry sectors, namely halal food and halal tourism.

Malaysia is the next word that appears most often in research with halal keywords. The next most relevant countries in research with the keyword “halal” are Indonesia and China. This shows that Malaysia, Indonesia, and China are often used as case studies or benchmarks for research related to halal keywords.

Malaysia is a Muslim-led multi-ethnic frontier in global halal hub. Malaysia, in particular, is an exemplar in the implementation and commercialization of halal standards. The country has systematically “certified, standardized, and bureaucratized halal production, trade, and consumption” in the last three decades (Fischer, 2011). Malaysia remains as a leader for global halal hub (State of Global Economic Report, 2015) due to the large potential of halal business and the unique position and strength. Their neighbor, Indonesia is the home to the world’s largest Muslim population. Based on data from the Central Statistics Agency (BPS), the total population of Indonesia reaches 237.6 million, with a Muslim population reaching 207 people or around 87%. With such a large number of the Islamic population, this proves that Indonesia is a potential market for various producers of goods and services.

#### 4.1.2. Word Cloud on Halal Context

In addition, we present the relevant words in the research with the halal keywords in the abstract and research title in the form of a word cloud and a word treemap. Word cloud describes the words that often emerge in literature with the keyword “halal.” The word cloud displays an image of the words in various sizes according to the number of words that occur. In terms of placement, word clouds tend to be random, but the dominant words are more visible because the dominant word is placed in the middle, with a relatively larger size. Figure 3 shows the detail of the word cloud result.
Regarding the result in Figure 4, we found that the most dominant words were related to halal, food, tourism, study, and Islamic. This confirms the previous findings that the halal food sector and halal tourism are the two most studied sectors.

To this date, most of the current research on "halal" discusses "halal food." This is because the word "halal" is relatively related to food and is mainly used in the food context. Some research conducted on halal food including but is not limited to implementation of standardization and certification of halal food (Ab Talib & Ai Chin, 2018; Katuk et al., 2020), halal food supply chain (Ab Rashid & Bojei, 2020; Azmi et al., 2020; Mohamed et al., 2020), determinants of halal-food consumption (Varany et al., 2020), the use of halal logos (Mohamed et al., 2020; Quoqab et al., 2020), halal food export (M. Y. Ali et al., 2020) and among others.

Additionally, research on halal tourism has also been initiated by many researchers with different research objects. Feizollah et al., (2021) examined tweets of “halal tourism” on social media to identify frequently discussed topics and analyzed sentiment on tweets related to “halal tourism.” Batour et al. (2018) analyzed the perception of non-Muslim tourists towards halal tourism in Malaysia and Turkey. Meanwhile, Rasul (2019) systematically examines this theme by examining the definition, scope, concept and mapping the research agenda related to halal tourism. Analysis related to the development of research on "halal tourists" to provide recommendations for further research was also carried out by several researchers, including Sulaiman & Adham (2019) and Rusydiana et al., (2021).

**4.1.3. Co-occurrence network**

Figure 5: Co-occurrence network on Halal Research

The co-occurrence network displays words related to halal keywords in the form of colored clusters by considering the relationship between one word to another. Figure 4 explains that there are 4 clusters with related keywords, with 4 different colors. The red and blue clusters depict the general picture of the halal industry, which is related to Islamic marketing and the halal value chain, and the words related to it. On the other side, the green and purple clusters are more specific to the two halal industry sectors: halal food and halal tourism, and words relevant to these two sectors.

The red clusters are dominated by words related to the halal value chain. The words in this cluster are halal, Malaysia, Islam, halal logistics, halal supply chain, consumer behavior, religion, Muslim, food, SMEs, supply chain, supply chain management, tourism, halal logo, halal supply chain management, Muslims, and meat. The blue clusters are dominated by words related to the market. The words in this cluster are halal market, Islamic market, Islamic marketing, Muslim consumers, Muslim consumer, Islamic markets, and halal marketing.

The green cluster is dominated by words related to halal food. The words contained in this cluster are halal food, halal certification, religiosity, purchase intention, attitude, halal awareness, halal product, halal cosmetics, knowledge, perceived value, subjective norms, theory of planned behavior, intention, subjective norm, and theory of planned behavior. At the same time, the purple cluster is dominated by words related to halal tourism. The words contained in this cluster are halal tourism, halal industry, Islamic tourism, satisfaction, Indonesian trust, Muslim tourists, China, customer satisfaction, halal products, Islamic finance, and loyalty.

**4.1.5 Thematic Map**

Figure 6: Thematic Map on Halal Research

This research also analyzed the thematic map based on density and centrality with halal keywords, divided into 4 quadrants. This result is obtained from a semi-automatic algorithm by reviewing the titles of all references to the object of research with relevant keywords other than the author's keywords, i.e., the results can capture deeper variations.

The upper left quadrant is a highly developed and isolated theme. Quadrants show specific themes and are rarely studied but have high development, which is indicated by high density but low centrality. The themes in this quadrant are halal industry, Muslim, trust, halal food and industry, international performance, and small and medium enterprises. Meanwhile, the lower-left quadrant is emerging or declining themes. This quadrant shows themes that have been used for a long time but experience an increasing or decreasing trend with low density and centrality. The themes in this quadrant are halal tourism, Islamic tourism, and satisfaction. Seeing developments with the sub-theme of halal tourism in the last few years, the trend of words contained in this quadrant has increased.
While the upper right quadrant is a motor/driving theme which is characterized by high both in density and centrality. So, it needs to be developed and is important to be studied for the further research. The themes in this quadrant are Islam, halal market, and Islamic marketing. The lower right quadrant is a basic and transverse theme characterized by high centrality and low density. These themes are important to be included in the research because they are general topics that are commonly used. The themes in this quadrant are halal, Malaysia, halal logistics, halal food, halal certification, and religiosity. Halal food is classified as a basic theme because the word "halal" compared to other sectors, as well as halal certification and logistics, which tend to be aimed at the halal food sector.

4.1.6 Conceptual Structure & Topics Dendogram

This study also generates a conceptual structure and thematic map of each word that often appears in research papers with the keyword “halal”. The detail of conceptual structure map is presented in figure 6. The conceptual structure map describes the mapping of words by region through the relationship between one word to another. As presented in Figure 7, the thematic map shows the widely used words and their relation to other topics and the classification of these topics by considering the height of the coordination line between words and between clusters. The conceptual structure map and thematic map generate a word classification into blue and red clusters. Each cluster contains words that have relevance to each other.

![Figure 7: Conceptual Structure Map](image)

Regarding the result obtained in Figure 8, the red cluster has more words than the blue cluster. Words in the red cluster are dominated by tourism-related words, including tourism behaviour, tourism destinations, tourism, heritage tourism, tourism markets, tourist destinations. Meanwhile, the blue cluster shows a relatively less variety of words and is more diverse.

**FINDINGS**

Based on the results of the overall analysis text, we established a ranking for the relevance of words or topics related to the keyword “halal” in the subject area of EEF (Economics, Econometrics, and Finance) and BMA (Business, Management, and Accounting) based on the classification of 7 industrial sectors. Halal by GIEI. The halal industry sector, which ranks at the top, shows that the sector has strong relevance and has been widely studied in research documents with a halal theme. While the lowest ranking indicates that there are still few research documents in the sector, further research can be recommended.

**Table 2: Ranking of Halal Sectors**

<table>
<thead>
<tr>
<th>No.</th>
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<th>Rank</th>
<th>Keywords</th>
</tr>
</thead>
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<tr>
<td>1</td>
<td>Halal Food</td>
<td>1</td>
<td>Halal food, food, meat</td>
</tr>
<tr>
<td>2</td>
<td>Halal Finance</td>
<td>3</td>
<td>SMES</td>
</tr>
<tr>
<td>3</td>
<td>Halal Travel (Tourism)</td>
<td>2</td>
<td>Halal tourism, Islamic tourism, muslim touristsits, tourism, destination</td>
</tr>
<tr>
<td>4</td>
<td>Halal Fashion</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Halal Media and Recreation</td>
<td>5</td>
<td>Islamic Marketing,</td>
</tr>
<tr>
<td>6</td>
<td>Halal Pharmaceuticals</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Halal Cosmetics</td>
<td>4</td>
<td>Halal Cosmetics,</td>
</tr>
</tbody>
</table>

The table above shows that halal food and halal tourism are the halal industry sectors with the strongest relevance in research documents with the keyword halal. This is in line with the findings in the results of the previous analysis text, where in the analysis of the most relevant words,
words cloud, and word treemap, the words halal food and halal tourism are the most frequently appearing. Co-occurrence network analysis also places these 2 sectors in separate clusters from other sectors. This is then strengthened by the thematic map analysis, which places halal foods and related words on the basic themes. The conceptual structure map and dendrogram analysis are dominated by the word tourism in the cluster with the most words.

Furthermore, we place the halal finance sector in third position in research relevant to the halal industry. This is confirmed by the lack of findings related to this sector. However, reviews of the existing literature show that the halal finance sector should be the sector that ranks first, because this sector is closely related to Islamic institutions and finance, which dominates the research of the halal industry in general.

However, this result is not wrong because the analysis text only analyzes research documents related to the specified keywords. This study uses the keyword “halal” in the subject areas of EEF (Economics, Econometrics, and Finance) and BMA (Business, Management, and Accounting). The term "halal finance", is rarely used in describing research on Islamic institutions and finance. Indeed, the word that is more commonly used is Islamic Finance. That is to say the description of "halal finance" by using the term "Islamic finance" in the classification of 7 halal industrial sectors by GIEI is considered appropriate.

Meanwhile, the halal fashion sector, halal media and recreation, halal pharmaceuticals, and halal cosmetics are in the bottom four positions and have low relevance in research documents with the keyword "halal". This shows that the research that discusses the four sectors of the halal industry is still very small so that it can be a topic recommendation for further research.

4.2. Future Research Potentials

Overall, studies on halal industry sectors were concentrated in certain countries, especially in Malaysian Case. Majority of prior studies concerning halal cosmetic has been done in Malaysian context. (Abd Rahman et al., 2015; S. Ali et al., 2016)Abd Aziz & Wahab, 2012; A. J. bt C. M. Hashim & Musa, 2014; A. J. C. M. Hashim & Musa, 2016). Sadeeqa, et.al (2013) suggested that research on halal pharmaceuticals should be researched and explored in various parts of the world, not only in Malaysia. (Ab Talib & Ai Chin, 2018) argued that further investigation on experimentation on Halal Food Supply Chain is needed in case of other countries exclude Malaysia. There is also suggestion from (Prayag, 2020; Sulaiman & Adham, 2019) to extend the geographical scope of studies related to halal tourism from muslim countries to understand howhalal as a concept and its associated practices have been adapted for tourism and hospitality purposes.

Even tough there are still many other of Islamic countries that need to be researched, to see the development of halal, as well as sectors which related to halal industry in a comprehensive manner. It also will be useful in revealing the situation of the subject in different cultures and various economic development levels. Further studies can be conducted the research related to halal which use middle east countries such as UAE, Saudi Arabia, Qatar or North African countries such as Marocco, Tunisia, and Algeria as study case. The development of halal industry in Turki, Bosnia, Herzegovina and other europa countries where a majority of the population is Muslim, also interesting to be knowing.

Furthermore, as has been shown in the findings, research on the halal industry so far is still focused on halal food and halal tourism. However halal is a more comprehensive concept than food and tourism, implying the need for extensive research studies for various unused sectors. Therefore, conducting studies on halal outside of food and tourism by researchers in future studies will contribute to the enrichment of the literature. There are still few studies that discussed other halal industrial sectors such as halal pharmaceuticals, halal media, halal cosmetics, and halal fashion. Although there are still few, there are several studies that discuss these sectors. We will present recommendations for further research based on other halal sectors in the appendix.

CONCLUSION

The result of this study shows that the topics related to the keyword 'halal' in the subject area of EEF (Economics, Econometrics, and Finance) and BMA (Business, Management, and Accounting), dominated by halal food and halal tourism. Further research is needed in other halal industrial sectors, namely halal pharmaceuticals, halal cosmetics, halal media, and halal fashion. As for research related to halal finance, actually a lot has been done using better known term namely 'Islamic finance'. Meanwhile from the object side, research documents on halal are still concentrated on several countries. Further studies need to be conducted with the case of various countries.

REFERENCES


## APPENDIX

### Future Research on Halal

<table>
<thead>
<tr>
<th>Future Research in Pharmaceuticals</th>
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<tbody>
<tr>
<td>Ramli et al., 2017</td>
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<td>Annabi &amp; Wada, 2016</td>
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<td>Daher et al., 2015</td>
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<td>Sadeeqa et al., 2013</td>
<td>effect of religiosity and spirituality on regular medication use</td>
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<td>Sulaiman &amp; Adham, 2019 &amp; Prayag, 2020</td>
<td>the geographical scope of studies must be extended from Muslim countries</td>
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<td>Battour et al., 2018</td>
<td>the impact of the perception of non-Muslim tourists towards the halal tourism market using quantitative data</td>
</tr>
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<td>Islam &amp; Madkouri, 2018</td>
<td>Future research should also be conducted in other Islamic countries which have different cultures</td>
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<tr>
<td>Feizollah et al., 2021</td>
<td>comparisons of the best practices in managing Halal industry across countries in the world market.</td>
</tr>
<tr>
<td>Vargas-Sánchez &amp; Moral-Moral, 2019</td>
<td>Deeper sentiment analytics related to halal tourism in social media, especially twitter</td>
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<td>Waijtragum, 2014</td>
<td>halal print advertising media in Muslim majority countries</td>
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<td>Shah et al., 2020</td>
<td>examine the effect of halal social media on brand satisfaction which included Muslim and non-Muslim customers</td>
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<td>examine the effects of social media as a moderating variable on the choices of Muslim customers</td>
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<tr>
<td>S. Ali et al., 2016, Abd Rahman et al., 2015</td>
<td>the geographical scope of studies must be extended to other countries, exclude Malaysia</td>
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<tr>
<td>Ngah et al., 2021</td>
<td>halal cosmetic in the consumer behaviour should use probability sampling techniques</td>
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<td></td>
<td>to compare the intention to purchase halal cosmetics across different countries, especially in Muslim countries.</td>
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<tr>
<td>Teng &amp; Wan Jusoh, 2013</td>
<td>intention to purchase halal specific products such as make-up, skin care, and other hygienic products</td>
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<tr>
<td>Brilliana &amp; Noviana, 2016</td>
<td>examine non-Muslim consumers' awareness, understanding and intention to purchase halal cosmetics and personal care products</td>
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<td></td>
<td>investigate the relationship between knowledge, religiosity, attitudes towards halal cosmetic products and intention towards different halal products, e.g., food and cosmetics.</td>
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<tr>
<th>Future Research in Halal Fashion</th>
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<tr>
<td>Afendi, 2020</td>
<td>adding several research variables such as religiosity, brand, price, foodstuffs, etc. on purchase decision for halal fashion</td>
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<tr>
<td>Zainudin et al., 2020</td>
<td>examine the research on general population (not only millenial) to predict the consumerism pattern of the next generation.</td>
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<td></td>
<td>use qualitative or mixed method to further refine the concept of Halal brand personality.</td>
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<tr>
<td>Hanzace &amp; Chitsaz, 2011</td>
<td>there is a lack of social, psychological, and women's studies from the perspective of Islamic fashion especially in Iran, generally among the countries in the world</td>
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<tr>
<td>Mohamed et al., 2020</td>
<td>how and why robust Halal Supply Chain management should be implemented in an organization</td>
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<tr>
<td>Azmi et al., 2020</td>
<td>identify the source of risk in Halal food supply chain to maintain the products as halal and toyyib for stakeholders.</td>
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<tr>
<td>Ab Talib &amp; Ai Chin, 2018</td>
<td>Application and experimentation on Halal food supply chain implementation in other countries</td>
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<tr>
<td>Author(s)</td>
<td>Future Research in Halal Finance</td>
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<tr>
<td>Samori, et.al 2014</td>
<td>research on food DNA to the invention of DNA food detector</td>
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</tbody>
</table>
| Paltrinieri & Kutan, 2019 | The impact of the monetary policy and the worldwide low interest rates on Islamic Financial instruments and Institutions behavior  
The impact of oil and other commodities on Shariah compliant instruments' prices and returns.  
The connection between Socially Responsible and Islamic investments.  
Islamic corporate finance, what explains the behavior, the structure, and the governance of Shariah compliant firms?  
The efficiency and stability of Islamic insurance vs the conventional ones.  
How can Islamic finance be interconnected with international business  
Whether Islamic microfinance institutions (MFIs) are any different from the conventional MFIs  
literature reviews on above topics and others in general to extend the research on Islamic Finance |
| Pesendorfer & Lehner, 2016 | Improvement of regulatory framework / implementation of regulatory body conformity with Shariah rules  
holistic implementation of ethical guidelines  
PLS usage (on financing and investment side) / matching of maturities  
derivatives / Islamic hedging tools  
westernisation of Islamic banking |
| Abedifar et al., 2015 | examining systemic risks and seeing how this links to Islamic and conventional banking  
features and links between liquidity and market funding risks  
linking financial and social inclusion in the Islamic world and see how this is related to notions of poverty, equality and economic development. |