

Exploring the Intellectual Structure of Published Islamic Equity Market Research: A Bibliometric Analysis Covering Over Two Decades of Literature Repertoire

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ABSTRACT

This paper examines the intellectual structure of published Islamic Equity Market (IEM) research over the extended period of two decades by showcasing its intellectual characteristics critical in framing future research trajectory in the area. The carefully selected published IEM literature was analysed using the established bibliographic mapping, social network analysis, and algorithms clustering of literature in discovering among others, its publication trend, co-authorship patterns, as well as revealing emerging themes worthy of research in the future. The results indicate a remarkable growth in the IEM related publications from 2000 until 2023 in tandem with the growth of Islamic finance industry globally. The number of authors collaborating across different institutions has also notably increased significantly, fostering interdisciplinary intellectual dialogue and meaningful research innovation. The clustering analysis results reveal four distinct themes of investment strategies, risk management, Shari'ah compliance, and financial inclusion. These strategic research niches provide valuable insights into the current IEM's intellectual structure, systematically highlighting potential future research directions. The intellectual characteristics presented in the paper represent essential knowledge structure for IEM scholars (new and matured) to consider in strategizing their future research agenda. The empirical results are based on a carefully selected literature on IEM, generating comprehensive and fresh intellectual characteristics reflecting state-of-the-art knowledge traits in the area. Nevertheless, the selected literature on published IEM research analysed in the paper is obtained from a single database of Scopus only.

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ملخص

يتناول هذا البحث البنية الفكرية للبحوث المنشورة حول سوق الأسهم الإسلامية (IEM) على مدى عقدين من الزمن من خلال عرض خصائصها الحاسمة في تأطير مسار البحث المستقبلي حول هذا الموضوع. تم تحليل الأعمال المنشورة بعناية باستخدام الخرائط البليوغرافية القائمة، وتحليل الشبكات الاجتماعية، وخوارزميات تجميع المواد في اكتشاف اتجاه نشر هذه الأعمال، وأنماط التأليف المشترك، بالإضافة إلى عرض الموضوعات الناشئة التي تستحق البحث في المستقبل. تشير النتائج إلى نمو ملحوظ في عدد المنشورات ذات الصلة بسوق الأسهم الإسلامية من عام 2000 حتى عام 2023 إلى جانب نمو قطاع التمويل الإسلامي في العالم. علاوة على ذلك، زاد عدد المؤلفين المتعاونين عبر المؤسسات المختلفة بشكل ملحوظ، مما عزز الحوار الفكري متعدد التخصصات وابتكار سيل للبحث الهادف. تكشف نتائج تحليل التجميع عن أربعة مواضيع متميزة وهي: استراتيجيات الاستثمار، وإدارة المخاطر، والامتثال للشريعة، والشمول المالي. توفر هذه المجالات البحثية الاستراتيجية رؤى قيمة حول البنية النظرية لسوق الأسهم الإسلامية الحالي، وتسلب الضوء بشكل مبهج على اتجاهات البحث المستقبلية المحتملة. تمثل الخصائص الفكرية المعروضة في هذا البحث البنية المعرفية الأساسية الخاصة بخبراء سوق الأسهم الإسلامية (الجديدة والناضجة) وذلك للنظر فيها عند وضع استراتيجية لجدول أعمالهم البحثي في المستقبل. تستند النتائج التجريبية إلى مواد مختارة بعناية عن سوق الأسهم الإسلامية، وتوفر خصائص فكرية شاملة وجديدة تعكس أحدث المعارف في هذا المجال. ومع ذلك، استمدت الأعمال المنشورة المختارة حول سوق الأسهم الإسلامية التي تم تحليلها في هذا البحث من قاعدة بيانات واحدة لسكوبس فقط.

RÉSUMÉ

Cet article examine la structure intellectuelle de la recherche publiée sur le marché des actions islamiques (IEM) sur une période prolongée de deux décennies en mettant en évidence ses caractéristiques intellectuelles essentielles pour encadrer la trajectoire future de la recherche dans ce domaine. La littérature publiée sur le marché des actions islamiques, soigneusement sélectionnée, a été analysée à l'aide de la cartographie bibliographique établie, de l'analyse des réseaux sociaux et des algorithmes de regroupement de la littérature pour découvrir, entre autres, ses tendances de publication, les modèles de co-auteurs, ainsi que pour révéler les thèmes émergents qui mériteront d'être étudiés à l'avenir. Les résultats indiquent une croissance remarquable des publications relatives à l'IEM entre 2000 et 2023, parallèlement à la croissance de l'industrie de la finance islamique au niveau mondial. Le nombre d'auteurs collaborant avec différentes institutions a également augmenté de manière significative, favorisant le dialogue intellectuel interdisciplinaire et l'innovation en matière de recherche. Les résultats de l'analyse de regroupement révèlent quatre thèmes distincts : les stratégies d'investissement, la gestion des risques, la conformité à la charia et l'inclusion financière. Ces créneaux de recherche stratégiques

fournissent des indications précieuses sur la structure intellectuelle actuelle de la MSE, en mettant systématiquement en évidence les orientations potentielles de la recherche future. Les caractéristiques intellectuelles présentées dans ce document représentent une structure de connaissances essentielle que les chercheurs de la MSE (nouveaux et anciens) doivent prendre en compte dans l'élaboration de leur futur programme de recherche. Les résultats empiriques sont basés sur une littérature soigneusement sélectionnée sur la GIE, générant des caractéristiques intellectuelles complètes et nouvelles reflétant les traits de connaissance les plus récents dans le domaine. Néanmoins, la littérature sélectionnée sur les recherches publiées sur la GIE et analysée dans le document est obtenue à partir d'une seule base de données de Scopus uniquement.

Keywords: Bibliometric analysis, Islamic Equity Market, Islamic Stock Market, Shari'ah Capital Market

JEL Classification: G10, G11, G19

1. Introduction

Islamic finance is a Shari'ah (Islamic law) based financing system which promotes morally and socially sound financing transactions void of religiously unacceptable elements of *riba'* (interest), *gharar* (speculation), and *maysir* (gambling) (Iqbal and Mirakhor, 2011). Similar to its conventional counterpart, the capital market in the Islamic finance context consists of both debt and equity components. The latter, i.e., the Islamic equity market (IEM), represents a significant source of funding and investment platforms for both Islamically inclined entrepreneurs and investors. It essentially consists of Shari'ah compliant financial instruments, the examples of which are equity and mutual funds, as well as real estate investment trusts (REITs). The IEM primarily operates on the basis that all equities are evaluated based on established parameters within the two types of analyses covering first, the qualitative analysis which looks at the characteristics of the firm and second, the quantitative analysis which considers the firm's financial statistics. This evaluation framework has been applied in many major stock index providers (e.g., Dow Jones, FTSE and MSCI) offering Shari'ah compliant stock indices, giving rise to Shari'ah indices such as Turkey Participation Index, Pakistan Mezan Islamic Index, and the Malaysian EMAS Islamic Index.

The emergence of IEM as a religious based alternative to investment and fund sourcing platforms has effectively created rich areas for academic research. Given its alternative status, most prior studies, theoretical or otherwise, have adopted the comparative perspective in their research

objectives. Utilizing multiple contexts and scenarios, prior studies have penetrated myriads of issues including (but not limited to) performance, liquidity, risk and diversification strategies. Prior empirical studies have shown that IEM creates significant benefits to market participants in terms of greater resilience in times of severe market disruptions due to global health crisis (Hasan et al., 2022), causing it to become a preferred and exclusive investment platform for portfolio diversifications. The IEM was also found to provide hedging, safe haven and flexibility features (Fogli and Panetta, 2020). As the literature develops in tandem with the development of the IEM industry, another stream of literature which takes the summative perspective had emerged. These studies which adopt different methodological approaches of either literature survey (e.g., Hassan et al., 2021) or bibliometric technique (e.g., Mohamad-Shafi and Tan, 2023), effectively provided bird's eye view of the IEM's literature progress and development, highlighting critical attributes pillaring the literature repertoire in the area.

This research endeavour complements the existing summative literature on IEM by comprehensively covers the relevant literature range and critically analyse its important attributes. Adopting similar bibliometric approach albeit with additional analysis component of literature clustering, the paper examines IEM's intellectual structure by analysing its core intellectual components based on carefully selected Scopus indexed published IEM literature. These pool of research documents are critically analysed using the bibliographic mapping, social network analysis, and literature clustering in showcasing its core intellectual components including publication trend, co-authorship patterns, as well as highlighting emerging themes relevant for future IEM research.

The bibliometric analysis is a scientific and objective literature analytical technique, the aim of which is to evaluate the scientific field of the chosen topic by allowing researchers to obtain a full picture of the topic's historical growth and important features (Ellegaard and Wallin, 2015), besides penetrating the complexities of a discipline's evolutionary history (Donthu et al., 2021). The technique also allows researchers to generate information about the field's expansion and its most noteworthy authors (Moed et al., 1985), systematically informing researchers of possible co-researcher(s) among the most prolific authors (Budd, 1988). Accordingly, the following research questions are developed:

RQ1: What is the publication trend of IEM research?

RQ2: Who are the most active contributors to published IEM research?

The bibliometric analysis further provides avenue through which the IEM's knowledge structure could be elaborated and subsequently analysed. This includes the critical components of literature importance based on citation, publication outlet's popularity, characteristics on productivity and frequently used author keywords. These collectively highlight IEM's publishing patterns which would potentially help IEM scholars to effectively navigate the research process in the area. In the publication realm, academic journals are practically of heterogenous quality and hence possess different quality ranking, depending on its ability to meet the specific quality metrics as provided by the relevant databases. Publishing in quality suspect publication outlets could potentially be due to lacking the necessary knowledge in identifying the most reputable publication outlets in the field of study (Lin et al., 2019). As this effectively hinders other researchers from replicating the same study for scientific verification (Chytrý et al., 2023), bibliometric analysis helps to uncover advancements in a particular field and highlights emerging areas within that field (Choiijil et al., 2022).

In terms of citation analysis, the outcomes effectively underline credible publications, thereby facilitating new and matured researchers to understand how the research area has evolved over time, besides identifying major contributors to the field (Ho, 2012). Highlighting the knowledge evolution directly uncovers knowledge gaps in the literature, apart from providing quantifiable information about authors' characteristics (Dubin and Arthur, 1993). This further helps researchers to identify and evaluate a particular author's contributions, thereby providing guidance in deciding on matters related to research collaborations (Lazar and Chithra, 2020). Analysis of common author keywords on the other hand, helps novice researchers to identify popular keywords or synonyms commonly used by established researchers in the relevant field. Thus, the following RQs are formed:

RQ3: Which IEM papers are the most cited?

RQ4: Which countries are the most productive in IEM publications?

RQ5: Which journals are the most important in IEM publications?

RQ6: Which affiliations are the most productive in IEM publications?

RQ7: What are the most frequently used author keywords in IEM studies?

Intellectual structure of a particular research field could also be explored from the specific perspectives of collaboration, co-citation trend and literature clustering. Information on collaboration and co-citation effectively facilitate researchers planning to engage in global collaboration (Pesta et al., 2018) as bibliometric analysis provides insights into co-citation patterns (Wang and Li, 2014) and identifies potential partners among prolific authors (Budd, 1988). Moreover, the analysis of keywords co-occurrences in bibliometric analysis further helps researchers to examine publication patterns and conceptual relationships indicating literature relatedness (Baker et al., 2020). Based on the above, the following RQs are proposed:

RQ8: What is the pattern of collaboration and co-citation trends in IEM publications?

RQ9: What is the literature clustering focus in IEM publications?

The empirical results presented in this paper suggest a remarkable growth in the IEM literature during the twenty-three years period under review, consistent with the growth of global Islamic finance industry. The same could also be observed in global collaboration, which translated into a commendable interdisciplinary intellectual dialogue and meaningful research innovation. The four strategic research niches based on the apparent themes arising from the clustering analysis effectively highlights potential future research directions. The themes are investment strategies, risk management, Shari'ah compliance, and financial inclusion.

The significance and hence, the contributions of this bibliometric study on IEM could be viewed from at least three different perspectives. First, it complements the summative literature on Islamic finance, focusing the analysis on the specific area of IEM as opposed to the broad area of Islamic finance literature. For instance, recent bibliometric study by Mohamad-Shafi and Tan (2023) covers the broad element of Islamic capital market (ICM), thereby deemphasizing the equity segment of the industry. Another summative study by Hassan et al. (2021) reviews the literature on Islamic stock market, growth and real-estate finance using a

literature survey approach, contrastingly different from the objective analytical tools in bibliometric analysis.

Second, this paper adds incrementally to the existing body of IEM knowledge by analysing data sourced from the Scopus database over an extended period of twenty-three years (2000 to 2023). This is different from earlier study by Mohamad-Shafi and Tan (2023) which utilizes publications from the Web of Science (WoS) database from 2000 to 2021. Technically, WoS and Scopus may privilege Natural Sciences, Engineering, and Biomedical research over Social Sciences, Arts, and Humanities and differ substantially in coverage (Mongeon and Paul-Hus, 2015). Scopus is renowned for its extensive coverage of academic journals in comparison to WoS (Meho and Rogers, 2008), rendering it a more favourable option for providing specific publication metrics (Powell and Peterson, 2017). Hence, the use of different databases may affect the bibliometric analysis results for research valuation purposes. Third, as the empirical results are premised on a carefully selected literature on IEM sourced from a database with wide coverage, it generates comprehensive and fresh intellectual characteristics reflecting state-of-the-art knowledge traits in the IEM field. This represents critical elements for IEM scholars (new and matured) to consider in strategizing their future research agenda.

The rest of the paper is divided into the following sections: A brief overview of the IEM is given in the next section, followed by a section that describes the method used to locate information on prior IEM research works, including the suitable analytical techniques. The functional analysis results are then reported and discussed in the results and discussions section. Final section concludes the paper with ramifications of the findings that are translated into recommendations on promising areas for future research.

2. Literature Review – The Islamic Equity Market

Securities trading is only permissible in Islam conditional upon the entire activities are based on Shari'ah. The market which the activities are conducted is known in the literature as the IEM, its key characteristics of which include adherence to the principles of transparency, fairness, risk sharing, and the explicit prohibition of religiously unacceptable activities such as those gambling and speculative in nature (Iqbal and Mirakhor, 2011). The extant literature provides key conceptual characteristics of IEM, contrastingly different from its conventional counterpart. First,

rather than profit maximisation per se in the conventional setting, the IEM is conceptually based on fairness and openness (Ali et al., 2013; Kalimullina and Shamil, 2020), suggesting that all investors are to be treated equally, with no regard for ethnicity, religion, or gender. Second, the IEM conceptually replaces competition with risk sharing, creating ethical and healthy trading environment (Maghrebi and Mirakhor, 2015). Finally, unlike the conventional market setting, the IEM prohibits suppressive and unethical elements of interest and speculation (Jabeen and Kausar, 2022; Naeem et al., 2022), thereby providing equity trading ecosystem which supports justice and fairness (Haque and Mirakhor, 2010).

Notwithstanding certain conceptual distinctions, Islamic Equity Markets (IEMs) exhibit similarities to their conventional counterparts in several key aspects. Firstly, both markets are grounded in the principle of ownership. This principle accords rights to shareholders proportionate to their shareholdings in a company, aligning with the Islamic finance principle of equitable risk and return sharing. Equity financing in IEMs, resembling *mudarabah*-type financing, is consistent with Shariah requirements for risk and return sharing, as elucidated in the overview of Shariah-compliant equities (Kahya et al., 2020).

Secondly, IEMs typically adopt a partnership-based ownership structure rather than individual ownership. This structure treats shareholders as partners, sharing in both the earnings and losses of the firm. Such an arrangement is crucial in Islamic finance, emphasizing ethical investments and communal risk-bearing. The relationship between this ownership structure and Islamic bank performance, particularly considering the identity of the block investor, has been a subject of empirical investigation, highlighting its significance in the context of Islamic finance (Zouari & Taktak, 2014).

Furthermore, studies have shown that Islamic equities can be less risky than their conventional counterparts. For instance, during the Global Financial Crisis, Islamic equities were found to be less risky than conventional equities, suggesting a distinct risk profile inherent to IEMs (Mwamba et al., 2017; Ahmad et al., 2018).

The emergence of IEM as an Islamic based alternative to the conventional equity market has attracted considerable research attention, leading to empirical research recognizing its significant potential for economic

growth and development (Naeem et al., 2022) as it offers an alternative source of funding for firms and promotes financial stability and inclusiveness (Ledhem & Mekidiche, 2020; Hassan, Aliyu, Saiti, & Abdul Halim, 2021; Butt, Sadaqat, & Shear, 2023), in line with the Islamic tenets. For instance, as the goal of investing in IEM is long-term growth and not immediate cash flow, it has been discovered that the IEM is less volatile, implying a stable investing environment (AlKhazali et al., 2022). Listed issuers in the IEM are also found to be less subject to interest rate swings and other global economic issues due to their concentration on Shari'ah compliance (Hassan et al., 2022). Additionally, the IEM has shown comparable returns to conventional equity market, while exhibiting lower volatility and lower downside risk (AlKhazali et al., 2022), providing IEM investors with attractive risk-adjusted returns on their investments. Prior studies have also provided evidence that Shari'ah compliance standards in the IEM setting effectively ensure efficiency in the Islamic based market, particularly with regards to the type of business transactions, sources of income, and the use of credit. As Shari'ah rules are adhered to, firms tend to experience lower operational costs and leverage, and more cash on hand (Derigs and Marzban, 2008), the characteristics of which are consistent with high levels of financial stability and thus, long-term performance.

3. Bibliometric Method

The scientific-research approach to bibliometric analysis uses appropriate statistical tools to analyze a wide variety of published reading materials including books, journals, and other publications (Linnenluecke et al., 2020). It enables the application of impact assessment activities on variety of resources, including selected research areas, groups of researchers, published resources, and search functions for identifying high-impact papers within a particular research area (Donthu et al., 2021; Ellegaard and Wallin, 2015). Figure 1 depicts the same direction prior bibliometric investigations have pursued (e.g., Mansour et al., 2022). Prior IEM publications were drawn from the Scopus collection on 13th September 2023. It represents a comprehensive and interdisciplinary bibliographic database covering articles referenced from various publications, including journals, books, and conference proceedings.

The data search was based on the article title related to IEM, i.e., “Islamic equity market*” OR “Islamic equity” OR “Islamic equities” OR “Islamic stock* market*” OR “Sharia* capital market*” OR “Sharia* equity

market*” OR “Sharia equities market*” OR “Sharia* stock* market*” OR “Islamic capital market*” OR “Islamic stock* share*”. A total of 204 documents were obtained from the query, which output was used to conduct the bibliometric analysis. The citation analysis was conducted using ‘Harzing Publish or Perish’ software in order to obtain the citation metrics and other frequencies. Besides that, other frequencies were also calculated, and the graph and chart are designed using Excel. To explore the IEM knowledge structure, analyses were done on all characteristics available in the database.

Figure 1: Flow diagram of the search strategy

| Topic, Scope & Eligibility | |
|----------------------------|---|
| Topic | Islamic Equity Market |
| Scope & Coverage | Database: Scopus Time Frame: All Source Type: All Search Field: Article Title Language: English Document Type: All |
| Keywords & Search String | TITLE(“Islamic equity market*” OR “Islamic equity” OR “Islamic equities” OR “Islamic stock* market*” OR “Sharia* capital market*” OR “Sharia* equity market*” OR “Sharia equities market*” OR “Sharia* stock* market*” OR “Islamic capital market*” OR “Islamic stock* share”*) |
| Screening & Selection | |
| Date Extracted | 13 th September 2023 |
| Identified & Screened | N = 205 |
| Removed | N = 1 |
| Selected for Analysis | N = 204 |

Source: Adapted from Zakaria et al. (2021)

In addition, social network analysis was also conducted to map the relationships between authors, organizations, and countries. This enables a visualization of the knowledge flow within the IEM research community, revealing core hubs and influential nodes in the network. Finally, clustering technique was also applied to classify the literature into specific thematic groups or research topics. The emerging categories

facilitate the identification of research trends, dominant research areas, and synergies between different subfields in IEM.

4. Analysis and Findings

4.1. Descriptive Analysis

The sample period for this paper is from 2000 to 2023 and the data was retrieved from the Scopus database on the 13th of September 2023. The details of all 204 papers are presented in Table 1 which indicates that the top three document types are articles (178: 87.2%), book chapters (13: 6.4%), and others (conference papers, reviews, and book series) (13: 6.4%). These effectively reflect the broad coverage of IEM issues in its literature repertoire as its publications appear in almost different types of documents.

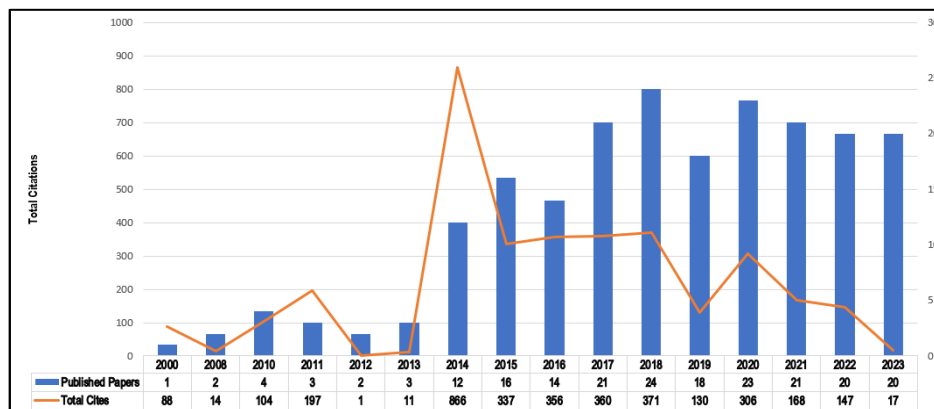
Table 1: Main information regarding selected articles

| Description | Results |
|--|--------------|
| MAIN INFORMATION ABOUT THE DATA | |
| Timespan | 2000 to 2023 |
| Total Sources (Journals, Books, etc.) | 113 |
| Documents | 204 |
| Average Years from Publication (All Docs) | 4.78 |
| Average Citations per Document (All Docs) | 16.83 |
| Average Citations per Year per Document (All Docs) | 3.52 |
| DOCUMENT TYPES | |
| Article | 178 |
| Book Chapter | 13 |
| Conference Paper | 6 |
| Total Reviews | 6 |
| Book series | 1 |
| AUTHORS | |
| Total Author Appearances | 576 |
| Total Single-Authored Documents | 31 |
| Total Authors of Single-Authored Documents | 29 |
| Total Authors of Multiple-Authored Documents | 165 |
| Average Documents per Author | 0.44 |
| Average Authors per Document | 2.29 |
| Average Co-Authors per Document | 1.29 |
| Collaboration Index | 2.97 |
| LANGUAGE | |
| English | 204 |

4.1.1. Annual Publication Trends

The answer to RQ1 (What is the publication trend of IEM research?) is presented in Figure 2 which showcases the increasing publication trend over the period under review with the highest increase could be observed in 2014 (12 documents) with 300% increase from the year 2013 (3 documents). The Harzing’s Publish or Perish software identified the first IEM paper published in the year 2000 with the title “Religion, ethics and stock trading: The case of an Islamic equities market” by Naughton and Naughton (2000). The growth is remarkable as the quantity of publication never dropped below 10 documents post 2013, slightly above the average of 9 documents per year and in fact it remains equivalent or above 20 documents starting from the year 2020 onwards.

Figure 2: Annual publication trends



Source: Authors

The notable publication growth over the period could be explained from the relevant perspectives related to the development and performance of Islamic financial sector as well as the Islamic stock market. The global landscape of Islamic financial sector has seen a substantial growth during the period, reporting 14% growth in 2019 to \$1.99 trillion in Islamic finance assets, relative to a mere 1% growth the year before on the back of 5% annual growth over the 3 years period beginning 2015 (ICD, 2020). The sector’s assets stood at \$3.9 trillion as at 2021 and projected to grow to almost \$6 trillion in 2026 (ICD, 2022). This serves as a strong premise for the same growth in academic research, as researchers were motivated to explore critical elements such as the reasons behind such growth and

comparative evaluation vis-à-vis conventional finance. Besides, the growth further fuelled the growing curiosity of investors toward Shari'ah based financial products (Jabeen and Kausar, 2022), leading to an impressive growth and advances in the IEM research. Another possible explanation is that investors are seeking out novel opportunities for portfolio management and diversification, which has increased IEM related research in comparison to conventional option (Foglie and Panetta, 2020). Thus, the growth and increasing popularity of Islamic finance could be the plausible triggering factor for the growing IEM publications as reported above.

4.1.2. Top Authors

RQ2 (Who are the most active contributors to published IEM research?) involves several analyses of research productivity in terms of the author(s), geographical regions, and organizational affiliation. Table 2 lists top ten most productive authors in IEM field, with Bacha, O.I. affiliated to “International Centre for Education in Islamic Finance, Malaysia” as the top author producing seven papers and contributed about 3.43% of the total IEM publications. The second and third most productive authors are Ashraf, D from the “Islamic Research and Training Institute, Saudi Arabia (A member of the Islamic Development Bank Group)” and Hammoudeh, S. from “University of Sharjah, United Arab Emirates”, each with six IEM documents (2.94%). These and the remaining authors have collectively contributed to the development of IEM research as their publications have been featured in prestigious financial and economic journals, providing valuable insights into the current landscape of IEM research and practice and directly shaping the direction of the same. The results also suggest that most of the IEM publications came from the Asian region which is unsurprising as the region is mostly populated by Muslims who have been championing the creation and advancement of IEM.

Table 2: Top 10 Most Productive Authors

| Authors | TP | % | Affiliation | Country | h | g | TC | PYS |
|---------------|----|------|---|----------------------|---|---|-----|------|
| Bacha, O.I. | 7 | 3.43 | International Centre for Education in Islamic Finance | Malaysia | 7 | 7 | 298 | 2014 |
| Ashraf, D. | 6 | 2.94 | Islamic Research and Training Institute | Saudi Arabia | 6 | 6 | 227 | 2014 |
| Hammoudeh, S. | 6 | 2.94 | University of Sharjah | United Arab Emirates | 6 | 6 | 565 | 2014 |
| Masih, M. | 6 | 2.94 | University of Karachi | Pakistan | 5 | 6 | 226 | 2014 |
| Hassan, M.K. | 5 | 2.45 | University of New Orleans | United States | 4 | 5 | 69 | 2018 |
| Jawadi, F. | 5 | 2.45 | University Lille | France | 5 | 5 | 71 | 2015 |
| Jawadi, N. | 5 | 2.45 | IPAG Business School | France | 5 | 5 | 71 | 2015 |
| Sensoy, A. | 5 | 2.45 | Faculty of Business Administration, Bilkent University, | Turkey | 5 | 5 | 305 | 2015 |
| Ahmad, R. | 4 | 1.96 | Faculty of Business and Accountancy, University of Malaya | Malaysia | 3 | 4 | 21 | 2017 |
| Balli, F. | 4 | 1.96 | School of Economics and Finance, Massey University | New Zealand | 4 | 4 | 57 | 2019 |

Note: TP: Total number of publications; h: h-index; g: g-index; TC: Total citations; PYS: Publication year start

4.1.3. Most Cited Papers

The answer to RQ3 (Which IEM papers are the most cited?) is presented in Table 3 which indicate that the highest cited IEM document with 194 citations was authored by Hayat and Kraeusl, published in the year 2011 entitled “Risk and return characteristics of Islamic equity funds”. The citation value is effectively more than 10 times the average value of 17 citations per document calculated for all documents over the 23 years period covered in this study. It also generates an average value of 16 citations per year since its publication which is slightly lower than the calculated average citation value for all 204 documents in the sample. The commendable high citation is potentially due to the paper’s pioneering status which investigated the risk and returns characteristics of Islamic equity funds. The topic is important as it peeks into the performance of Shari’ah based investment portfolios. Comparing 80 Islamic equity funds

data in 20 different countries with its conventional counterparts, the results indicate that Islamic equity funds have similar risk-return features to conventional ones, albeit with less volatility and more protection against downside risk. This research effectively lays the groundwork for subsequent research to either refute or validate the conclusions drawn.

Table 3: Top 10 Most Cited Papers

| Source | Title | TC | C/Y |
|------------------------------|---|-----|-----|
| Hayat and Kraeussl (2011) | Risk and return characteristics of Islamic equity funds | 195 | 16 |
| Ajmi et al. (2014) | How strong are the causal relationships between Islamic stock markets and conventional financial systems? Evidence from linear and nonlinear tests | 161 | 18 |
| Hammoudeh et al. (2014) | Dynamic dependence of the global Islamic equity index with global conventional equity market indices and risk factors | 154 | 17 |
| Majdoub and Mansour (2014) | IEM integration and volatility spillover between emerging and US stock markets | 130 | 14 |
| Mensi et al. (2017) | Dynamic risk spillovers between gold, oil prices and conventional, sustainability and Islamic equity aggregates and sectors with portfolio implications | 117 | 20 |
| Rizvi et al. (2014) | An analysis of stock market efficiency: Developed vs Islamic stock markets using MF-DFA | 116 | 13 |
| Ashraf and Mohammad (2014) | Matching perception with the reality- Performance of Islamic equity investments | 97 | 11 |
| Nagayev et al. (2016) | On the dynamic links between commodities and Islamic equity | 90 | 13 |
| Shahzad et al. (2018) | Extreme dependence and risk spillovers between oil and Islamic stock markets | 87 | 17 |
| Naughton and Naughton (2000) | Religion, ethics and stock trading: The case of an Islamic equities market | 88 | 4 |

Note: C/Y: citation per year; TC: Total citations

The other highly cited documents with an average citation value per year exceeding the average citation value for all documents in the sample include Ajmi et al. (2014) (18 citations) and Mensi et al. (2017) (20 citations). This implies the popularity and significant impact of these documents within the ambit of IEM field as they were able to garner significant influence over subsequent IEM publications as reflected in the

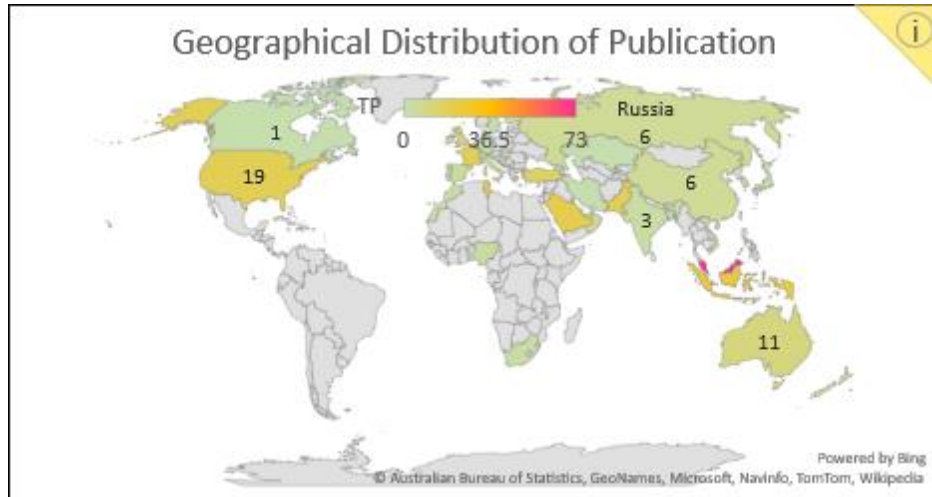
overwhelming calculated average citation value per year over and above the average citation value for the whole sample.

4.1.4. Most Productive Countries

The answers to RQ4 (Which countries are the most productive in IEM publications?) are tabulated in Table 4 and visualised in Figure 3. It is found that 45 countries had contributed to IEM publications, indicating that IEM research is of global interest. Notably, more than 75% of the published documents could be traced from authors with affiliations in Islamic countries located in the Asian region (e.g., Malaysia, Indonesia, Tunisia, Kingdom of Saudi Arabia and Pakistan), with the remaining coming from non-Islamic countries such as France, United States, United Kingdom and Australia. The position of Malaysia being country with the highest number of IEM publications (73 documents) is not surprising given the fact that it is considered an Islamic finance centre due to its active involvement in developing Islamic financial products. It has made substantial efforts to develop and promote Islamic financial products and services, establishing a comprehensive regulatory framework for Islamic finance, including equity markets. Such supportive infrastructure and regulatory environment have essentially encouraged innovation in IEM practice and research.

Table 4: Top 10 Most Productive Countries

| Country | Total Publications | % | Total Citations | Citation per paper |
|----------------|--------------------|--------|-----------------|--------------------|
| Malaysia | 73 | 35.78% | 803 | 11 |
| Indonesia | 24 | 11.76% | 83 | 5 |
| Tunisia | 24 | 11.76% | 859 | 36 |
| Saudi Arabia | 21 | 10.29% | 651 | 31 |
| France | 19 | 9.31% | 848 | 45 |
| Pakistan | 19 | 9.31% | 276 | 15 |
| United States | 19 | 9.31% | 788 | 42 |
| Turkey | 16 | 7.84% | 423 | 26 |
| United Kingdom | 14 | 6.86% | 235 | 17 |
| Australia | 11 | 5.39% | 245 | 22 |

Figure 3: Total Publications Based on Countries

4.1.5. Top Publication Outlets

The answer to RQ5 (Which journals are the most important in IEM publications?) suggests that all 204 documents in the dataset have been published in 32 different source titles. Most of these publications appeared in the popular source titles (with 2 or more publications), which data are presented in Table 5, the genres of which are observably in the Islamic finance or its related domains. The “Pacific Basin Finance Journal” emerged as the most active publication title (16: 7.84%), followed by the “International Journal of Islamic and Middle Eastern Finance and Management” (12: 5.88%) and “Borsa Istanbul Review” (6: 2.94%). These top 3 titles are ranked either in quartile 1 (Q1) or 2 (Q2) of Scopus quality ranking, which effectively reflects their respective publication quality in the area with Q1 being the highest quality. These reputable journals primarily cover broad spectrum of financial topics, including those related to Shari’ah based finance in an international context. Its popularity in the IEM research community suggests that researchers often explore cross-regional connections and global implications.

Table 5: Top 10 Journals Frequently Publishing IEM Studies

| Source Title | TP | % |
|---|----|-------|
| Pacific Basin Finance Journal | 16 | 7.84% |
| International Journal of Islamic and Middle Eastern Finance and Management | 12 | 5.88% |
| Borsa Istanbul Review | 6 | 2.94% |
| Journal of Islamic Accounting and Business Research | 6 | 2.94% |
| Applied Economics | 5 | 2.45% |
| Emerging Markets Finance and Trade | 5 | 2.45% |
| Journal of Islamic Monetary Economics and Finance | 5 | 2.45% |
| Research in International Business and Finance | 5 | 2.45% |
| Energy Economics | 4 | 1.96% |
| Journal of Business Ethics | 4 | 1.96% |

Note: TP: total number of publications

4.1.6. Most Productive Affiliations

For RQ6 (Which affiliations are the most productive in IEM publications?), the top 10 productive institutions are presented in Table 6. Consistent with results presented in RQ2 and RQ4 earlier, it is apparent that institutions based in Malaysia i.e., International Islamic University, Malaysia (28: 13.72%), INCEIF University, Malaysia (18: 8.82%), Universiti Malaya (8: 3.92%), Universiti Teknologi MARA (6: 2.94%) are among the top 10 most productive institutions producing the IEM literature. This is again consistent with the notion that Malaysia has established itself as a hub for Islamic finance and at the forefront of research and education in this domain. The high publication count demonstrates its commitment to consistently advancing the IEM knowledge. Other productive affiliations populated the list are also those based in Tunisia i.e., Université de Tunis El Manar (9: 4.41%) and University of Sfax (6: 2.94%).

Table 6: Top 10 Affiliations of Most Productive Authors

| Institution | TP | % | Country |
|---|-----------|----------|----------------|
| International Islamic University Malaysia | 28 | 13.72% | Malaysia |
| INCEIF University, Malaysia | 18 | 8.82% | Malaysia |
| Université de Tunis El Manar | 16 | 7.84% | Tunisia |
| Universiti Malaya | 8 | 3.92% | Malaysia |
| Universiti Teknologi MARA | 6 | 2.94% | Malaysia |
| Drexel University | 6 | 2.94% | USA |
| Sakarya Üniversitesi | 6 | 2.94% | Turkey |
| University of New Orleans | 6 | 2.94% | USA |
| University of Sfax | 6 | 2.94% | Tunisia |

Note: TP: total number of publications

4.1.7. Most Frequent Keywords

The answer to RQ7 (What are the most frequently used author keywords in IEM studies?) are presented in Table 7, providing the top 10 keywords frequently used in IEM research. Based on the 204 documents, among others, the most frequently used keywords are “Islamic Finance” (37: 18.14%), “Islamic Stock Market” (21:10.29%), “Stock Market” (21: 10.29%) and “Islamic Capital Markets” (17:8.33%). These keywords which essentially capture the essences of IEM knowledge structure, constitute more than 50% of all keywords repeatedly used in prior IEM studies.

Table 7: Top 10 Most Frequently Used Keywords in IEM Studies

| Keywords | TP | % |
|------------------------|-----------|----------|
| Islamic Finance | 37 | 18.14% |
| Islamic Stock Market | 21 | 10.29% |
| Stock Market | 21 | 10.29% |
| Islamic Capital Market | 17 | 8.33% |
| Financial Markets | 16 | 7.84% |
| Commerce | 14 | 6.86% |
| Islamism | 14 | 6.86% |
| COVID-19 | 13 | 6.37% |
| Islamic Equity | 10 | 4.90% |
| Sukuk | 10 | 4.90% |

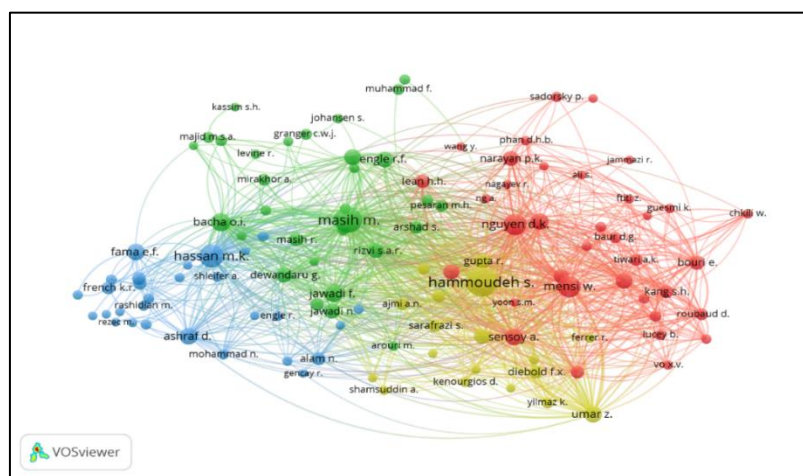
Note: TP: total number of publications

4.1.8. Collaboration and Co-Citation Pattern

The answer to RQ8 (What is the pattern of collaboration and co-citation trends in IEM publications?) is based on the results of data clustering technique, commonly used in previous studies on group research works (Radicchi et al., 2004). The technique is applicable to co-citation analysis with the aim to identify patterns of collaboration and interrelationship (Xu et al., 2018). It essentially offers a glimpse into the intellectual structure of a field, revealing which works are frequently cited together and hence, are conceptually related. To observe the co-citation network among the cited authors in IEM publications, a network visualisation map was also generated using the VOSViewer software.

Applying a full counting method with 18 being the minimum number of an author’s citations, a total of 114 documents met the threshold. Figure 4 shows the co-citation network based on author which consists of 4 clusters based on the 4 different colours. Authors in the same cluster are considered to have referenced one another in their studies. The blue cluster is dominated by Hassan, M.K., which research focus is on IEM performances. The red cluster by Mensi and Nguyen, which studies mainly focuses on risk. The green cluster by Masih, M. which looks at the Islamic equity portfolio, and finally the yellow cluster by Hammoudeh, S. the focus of which is the comparison between the Islamic and conventional types of equity markets. These represent foundational or seminal contributions that other researchers in the IEM field draw upon

Figure 4: Network visualization on co-citation based on author



As it is rooted in the principles of Shari'ah, the Islamic equity funds possess risk and return characteristics that are distinct from its conventional counterpart. In this regard, the global equity market's systematic failure effectively prompts a deeper performance analysis of the Islamic equity investments, thereby juxtaposing perceptions with reality (Abbes and Trichilli, 2015). Moreover, understanding the interplay between key commodities like gold, oil prices, and the stock market offers insights into dynamic risk spillovers and potential diversification benefits during tumultuous times (Shahzad et al., 2018)

4.1.9.2. Cluster 2 (green): A Comparison of Islamic and Conventional Market Dynamics

This cluster focuses on the similarities and differences in risk-return between the Islamic and conventional equity markets. The dynamic reliance revealed in worldwide IEM returns, marked by substantial variability over time and across markets is an important indication substantiating the issue (Hammoudeh et al., 2014). Furthermore, the cluster gives insights into Islamic banking strategic inefficiency commonly based on samples in the Gulf Cooperation Council (GCC) nations, demonstrating the effect of Islamic beliefs on business activities (Jawadi et al., 2020).

Furthermore, prior studies in this cluster also show significant disparities in how Islamic and conventional markets react to monetary and financial shocks. The Islamic financial markets are observed to frequently react differently to global economic events, showing some buffering from larger market changes (Ajmi et al., 2014). Studies also reveals that risk is growing in commodities markets such as gold and oil, as well as the Islamic stock market. These spillovers are relevant and noteworthy in that they demonstrate the interaction between Islamic financial instruments and global commodities markets (Mensi et al., 2017). All these insights contribute to nuanced understandings of the contradictory behaviour exhibited by Islamic and traditional financial markets, thereby highlighting the importance of considering religious principles, market efficiency and global economics of development in the analysis of this particular economic context.

4.1.9.3. Cluster 3 (blue): Islamic Capital Market Efficiency and Performances

This cluster investigates the operations and performance of Islamic capital markets, with an emphasis on market liquidity, price discovery, and trade dynamics. It also focuses on how Shari'ah rules and governance affect market efficiency. The findings shed light on Islamic capital market activities and operations. For instance, recent study by Tan & Shafi (2021) examines the Islamic capital market's significant impact on Malaysian economic growth, concentrating on its role in capital formation and financial stability. The study emphasises the crucial role of the Islamic capital market in boosting economic growth, serving as a major channel for investment and channelling savings into productive infrastructure, and ultimately contributing to Malaysia's better economic performance.

Furthermore, studies in the cluster further highlight the significance of Shari'ah governance in improving the efficiency of Islamic capital markets. For example, Miskam (2017) investigates Shari'ah governance and its critical role in guaranteeing Shari'ah compliance, which has a considerable impact on market integrity and stability. The study demonstrates how an effective Shari'ah governance structure is crucial for fostering trust among market participants and stakeholders, thereby facilitating the smooth functioning and sustainability of the Islamic financial market. Thus, appropriate governance structure not only ensures that the Islamic capital market complies with Shari'ah, but it also has a substantial impact on its performance and efficiency, supporting the market's resilience and capacity to promote economic growth

4.1.9.4. Cluster 4 (yellow): Islamic Equity Fund Performance during the COVID-19 Pandemic

This cluster focuses in analysing the performance of Islamic equity funds during the COVID-19 pandemic, considering factors such as market volatility, investor behaviour, and portfolio adjustments. Recent study by Mirza et al. (2022) analysed the risk-adjusted performance of Islamic equity funds and found that these funds showcased resilience during the market downturn caused by the pandemic. The study suggests that Islamic equity funds not only preserved capital but also delivered competitive returns relative to conventional benchmarks, highlighting their stability and reliability in times of market stress.

Additionally, other studies offer a comparative perspective on Islamic and conventional equity markets during the pandemic. For instance, Chowdhury et al. (2022) undertook a comparative examination of Islamic and conventional equity markets, revealing that Islamic equity markets experienced smaller maximum drawdowns and quicker recoveries than their conventional counterparts during the COVID-19 pandemic. This observation underscores the robustness and efficiency of Islamic equity markets in navigating through the financial challenges and uncertainties brought about by the global health crisis. These studies attributed the distinct market behaviours to the unique investment principles and risk-sharing mechanisms inherent in Islamic finance, which contribute to the stability and resilience of Islamic equity funds during turbulent times.

Collectively, the above clustering results that emanate from the reviewed IEM literature reveal critical themes supporting the field's knowledge structure. It covers the dynamic interdependencies between Islamic equities and commodities, providing crucial knowledge for resilient investment strategies during economic uncertainties. It also highlights the distinctive risk and return profiles of Islamic equity funds, offer investors valuable perspectives for ethical and financially sound investment opportunities in volatile markets. This understanding aids in crafting robust investment strategies, facilitating effective navigation through the complex dynamics of IEM during global economic turmoil.

4.2. Suggested Future Studies

Following the literature clustering results reported above, the following areas for future studies are proposed. First, the integration of environmental, social and governance (ESG) aspects into IEM domain is one potential research topic worth pursuing. The ESG considerations have grown in importance in conventional equity market as investors seek to engage in socially responsible businesses. Consequently, there is an opportunity to look into how ESG factors may have been embedded in the IEM activities. This could mean developing a new screening criterion that take ESG concerns into consideration or looking into how current Shari'ah compliant screening criteria could be upgraded to factor in ESG considerations (Tanin et al., 2023). Second, research on the comparative performance of IEM relative to its conventional alternative is a topic that needs to be explored further. While several studies have been conducted in this field, further research is required to incorporate varied

geographical and market situations. Future studies should also look at the impact of the health epidemic on IEM's comparative performance. For example, Abdullahi (2020) did a research assessing the correlation and volatility of Islamic stock indexes during the COVID-19 epidemic, providing insights into the behaviour of these markets throughout the crisis.

Third, another avenue for research may also involve the development of new and innovative Islamic financial products and equity market instruments. Historically, Islamic finance has been focusing on debt-based instruments such as sukuk, but new equity-based products that might assist the IEM's growth are needed. These products, which might include new types of funds such as equity-linked sukuk, or other novel financial instruments, could be introduced to meet the unique requirements of Shari'ah and the different risk appetite of Islamic investors (Billah, 2019). Fourth, it is also important to look at how technology has contributed to the growth of IEM, as there are huge opportunities to use technology to further improve the operational effectiveness and efficiency of IEM. Specific studies on the effectiveness of fintech tools to facilitate equity investments or studies examining the impact of blockchain technology are two examples worth accomplishing

5. Conclusion

The emergence of IEM being part of the Islamic finance ecosystem serves as an appealing alternative to entrepreneurs and investors sourcing for Shari'ah based platform for capital raising and investment. Scholarly investigations into IEM have revealed that it possesses distinctive features in contrast to its conventional counterpart. The extent literature also suggests that the IEM offers a secure environment for investing, comparable equity investment returns with less risk, and adherence to Shari'ah principles. This paper complements the existing literature, particularly those summative in nature, by reviewing carefully selected Scopus based IEM publications covering 23 years period up to 2023 using a bibliometric analysis, the review framework of which is based on nine research questions.

The reported results present a thorough examination of IEM's knowledge structure, including publishing patterns, co-authorship, social network analysis, and literature classification, providing a comprehensive picture of the field's evolution. Notably, it goes beyond a simple review of current

literature by methodically addressing multiple research questions. Leveraging on the bibliometric method allows this study to offer fresh perspectives on the development and dynamics of IEM research. Additionally, the emphasis on co-authorship patterns and social network analysis is particularly noteworthy, offering insight on research cooperation dynamics and significant personalities in the subject which are important for researchers in the area to consider in strategizing their IEM research agenda. The findings have implications for various IEM stakeholders, particularly academic scholars seeking to further advance the IEM research agenda as well as practitioners planning to promote sustainable and ethically sound equity trading practices. As such, this study contributes to the broader discourse on the strategic roles of IEM in extending the knowledge frontier of Islamic finance.

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References

- Al-Khatib, F. B., Dorret, A. F. and Elkhali, K. (2007), “Lorem ipsums Abbas, M.B., and Trichilli, Y. (2015). Islamic stock markets and potential diversification benefits. *Borsa Istanbul Review*, 15(2), 93-105. <https://doi.org/10.1016/j.bir.2015.03.001>.
- Abdullahi, S. I. (2020). Islamic equities and COVID-19 pandemic: measuring Islamic stock indices correlation and volatility in period of crisis. *Islamic Economic Studies*, 29(1), 50-66. <https://doi.org/10.1108/IES-09-2020-0037>
- Ahmad, W., Sehgal, S., & Bhanumurthy, N. R. (2018). Comparative performance of Islamic and conventional equity indices: Empirical evidence from an emerging economy. *International Journal of Islamic and Middle Eastern Finance and Management*, 11(1), 2-20. <https://doi.org/10.1108/IMEFM-01-2017-0014>
- Ajmi, A.N., Hammoudeh, S., Nguyen, D.K., and Sarafrazi, S. (2014). How strong are the causal relationships between Islamic stock markets and conventional financial systems? Evidence from linear and nonlinear tests, *Journal of International Financial Markets, Institutions and Money*, 28, 213-227, <https://doi.org/10.1016/j.intfin.2013.11.004>.
- Ali, A.J., Al-Aali, A., and Al-Owaidan, A. (2013). Islamic Perspectives on Profit Maximization. *Journal of Business Ethics*, 117, 467–475. <https://doi.org/https://doi.org/10.1007/s10551-012-1530-0>
- AlKhazali, O., Lean, H.H., and Zoubi, T. (2022). The Size Anomaly in Islamic Stock Indices: A Stochastic Dominance Approach. *International Journal of Financial Studies*, 10(4), 102-116. <https://doi.org/10.3390/ijfs10040102>
- Alotaibi, K.O., and Hariri, M.M. (2020). Content Analysis of Shariah-Compliant Investment Equity Funds in KSA: Does Social Justice Matter? *International Journal of Business and Management*, 15(6), 1–15. <https://doi.org/10.5539/ijbm.v15n6p1>
- Archer, S., and Karim, R.A.A. (2011). The growth of Islamic equity funds: a comparative study. *Journal of Asset Management*, 12(2), 138-150
- Ashraf, D. (2016). Does Shari'ah Screening Cause Abnormal Returns? Empirical Evidence from Islamic Equity Indices. *Journal of Business Ethics*, 134, 209–228. <https://doi.org/10.1007/s10551-014-2422-2>.
- Ashraf, D., and Mohammad, N. (2014). Matching perception with the reality—Performance of Islamic equity investments. *Pacific Basin Finance Journal*, 28, 175-189. [10.1016/j.pacfin.2013.12.005](https://doi.org/10.1016/j.pacfin.2013.12.005)
- Baker, H.K., Pandey, N., Kumar, S., and Haldar, A. (2020). A bibliometric analysis of board diversity: Current status, development, and future research directions, *Journal of Business Research*, 108, 232–246. <https://doi.org/10.1016/j.jbusres.2019.11.025>

- Billah, M. M. S. (2019). *Islamic insurance products: Exploring takaful principles, instruments and structures*. Springer Nature.
- Budd, J.M. (1988). A bibliometric analysis of higher education literature. *Research in Higher Education*, 28(2), 180-190. doi: 10.1007/BF00992890.
- Butt, H. A., Sadaqat, M., & Shear, F. (2023). Does Islamic financial development foster economic growth? International evidence. *Journal of Islamic Accounting and Business Research*, 14(6), 1013-1029. <https://doi.org/10.1108/JIABR-10-2022-0267>
- Choiijil, E., Mendez, C.E., Wong, W.-K., Vieito, J.P. and Batmunkh, M.-U. (2022), "Thirty years of herd behaviour in financial markets: a bibliometric analysis", *Research in International Business and Finance*, Vol. 59, doi: 10.1016/j.ribaf.2021.101506.
- Chowdhury, E.K., Dhar, B.K., and Stasi, A. (2022). Volatility of the US stock market and business strategy during COVID-19. *Business Strategy & Development*. 5(4). 350-360. <https://doi.org/10.1002/bsd2.203>
- Chytrý, M., Pillar, V.D., Price, J.N., Wagner, V., Wisner, S.K., and Zelený, D. (2023). The benefits of publishing in society-owned scientific journals. *Applied Vegetation Science*, 26(1), 1-5. <https://doi.org/10.1111/avsc.12705>
- Derigs, U., and Marzban, S. (2008). Review and Analysis of Current Shariah-Compliant Equity Screening Practices. *International Journal of Islamic and Middle Eastern Finance and Management*, 1(4), 285–303. 285–303. <https://doi.org/10.1108/17538390810919600>
- Dewandaru, G., Bacha, O. I., Masih, A.M.M., and Masih, R. (2015). Risk-return characteristics of Islamic equity funds. *Journal of Multinational Financial Management*, 29, 115-138. 10.1016/j.mulfin.2014.11.006
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., and Lim, W.M. (2021). "How to conduct a bibliometric analysis: An overview and guidelines". *Journal of Business Research*, 133, 285-296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
- Dubin, D. and Arthur, W. (1993), "Citation classics in clinical dermatologic journals citation analysis, biomedical journals, and landmark articles, 1945-1990", *Archives of Dermatology*, 129(9), 1121-1129.
- Ellegaard, O., and Wallin, J.A. (2015). The bibliometric analysis of scholarly production: How great is the impact?. *Scientometrics*, 105(3), 1809-1831. <https://doi.org/10.1007/s11192-015-1645-z>
- Foglie, D.A., and Panetta, I.C. (2020). Islamic stock market versus conventional: Are Islamic investing a 'Safe Haven' for investors? A systematic literature review. *Pacific-Basin Finance Journal*, 64, 101435. <https://doi.org/10.1016/j.pacfin.2020.101435>

- Guizani, M. (2021). Does Shariah compliance affect corporate cash holdings and cash adjustment dynamics? Evidence from Malaysia. 33(4), 459–473. <https://doi.org/10.1108/PAR-07-2020-0100>
- Hammami, Y., Bellalah, M., and Oueslati, B. (2021). COVID-19 and Islamic stock market volatility: Evidence from Dow Jones Islamic Market World Index. *Research in International Business and Finance*, 57, 101407.
- Hammoudeh, S., Mensi, W., Reboredo, J.C., and Nguyen, D.K. (2014). Dynamic dependence of the global Islamic equity market on international financial market conditions. *Pacific Basin Finance Journal*, 30, 189-206. DOI: 10.1016/j.pacfin.2014.10.001
- Hasan, M. B., Rashid, M. M., Shafiullah, M., and Sarker, T. (2022). How Resilient Are Islamic Financial Markets during the COVID-19 Pandemic? *Pacific Basin Finance Journal*, 74 (September 2022), 101817. <https://doi.org/10.1016/j.pacfin.2022.101817>
- Hasan, R., Hassan, M. K., and Aliyu, S. (2020). Fintech And Islamic Finance: A Review and Research Agenda. *International Journal of Islamic Economics and Finance*, 30(1). <https://doi.org/10.18196/ijief.2122>
- Hassan, M.K., Aliyu, S., Saiti, B., and Abdul-Halim, Z. (2021), A review of Islamic stock market, growth and real-estate finance literature. *International Journal of Emerging Markets*, 17(7), 1259–1290.
- Hayat, R., and Kraeussl, R. (2011). Risk and return characteristics of Islamic equity funds. *Emerging Markets Review*, 12(2), 189-203. 10.1016/j.ememar.2011.02.002
- Hazny, M.H., and Yusof, A.Y. (2020). Mathematical Modelling of a Shariah - Compliant Capital Asset Pricing Model. *Journal of Islamic Accounting and Business Research*, 11(1), 90–109. <https://doi.org/10.1108/JIABR-07-2016-0083>
- Ho, Y. (2012), “Top-cited articles in chemical engineering in science citation index expanded: a bibliometric analysis”, *Chinese Journal of Chemical Engineering*, 20 (3), 478-488.
- Iqbal, Z., and Mirakhor, A. (2011). *An introduction to Islamic finance: Theory and practice*. John Wiley & Sons. 10.1002/9781118390474
- Ismail, S.F., Ibrahim, S.H., and Mohamad, S. (2018). ESG and Shariah-Compliant Screening Criteria: A Review and Research Agenda. *Journal of Sustainable Finance & Investment*, 8(3), 246-261
- Jabeen, M., and Kausar, S. (2022). Performance Comparison between Islamic and Conventional Stocks: Evidence from Pakistan’s Equity Market. *ISRA International Journal of Islamic Finance*, 14(1), 59–72. <https://doi.org/10.1108/IJIF-07-2020-0150>
- Jawadi, N., Jawadi, F., and Cheffou, A. (2020). Computing the Time-Varying Effects of Investor Attention in Islamic Stock Returns. *Computational Economics*, 56, 131–143 <https://doi.org/10.1007/s10614-020-09988-y>. Kahya, E. H., Ersen, H. Y.,

Ekinci, C., Taş, O., & Simsek, K. D. (2020). Determinants of capital structure for firms in an Islamic equity index: comparing developed and developing countries. *Journal of Capital Markets Studies*, 4(2), 136-155. <https://doi.org/10.1108/JCMS-11-2019-0044>

Kalimullina, M., and Shamil, M. (2020). Heliyon Islamic Finance and Food Commodity Trading: Is There a Chance to Hedge against Price Volatility and Enhance Food Security? *Heliyon*, 6(August), e05355. <https://doi.org/10.1016/j.heliyon.2020.e05355>

Karim, M.M., and Masih, M. (2021). Do the Islamic Stock Market Returns Respond Differently to Macroeconomic Shocks? *Emerging Markets Finance and Trade*, 57(9), 2616-2631. <https://doi.org/10.1080/1540496X.2019.1663409>.

Lazar, N. and Chithra, K. (2020), “Comprehensive bibliometric mapping of publication trends in the development of building sustainability assessment systems”, *Environment, Development and Sustainability*, 23(4), 4899-4923, doi: 10.1007/s10668-020-00796-w.

Ledhem, M. A., & Mekidiche, M. (2020). Economic growth and financial performance of Islamic banks: a CAMELS approach. *Islamic Economic Studies*, 28(1), 47-62. <https://doi.org/10.1108/IES-05-2020-0016>

Lin, T., Lin, T., Potvin, P., Tsai, C., Lin, T. and Lin, T. (2019). Research trends in science education from 2013 to 2017: a systematic content analysis of publications in selected journals, *International Journal of Science Education*, 41(3), 367-387, doi: 10.1080/09500693.2018.1550274.

Linnenluecke, M.K., Marrone, M., and Singh, A.K. (2020). Conducting systematic literature reviews and bibliometric analyses, *Australian Journal of Management*, 45(2), 175–94. <https://doi.org/10.1177/031289621987767>

Maghrebi, N., and Mirakhor, A. (2015). Risk Sharing and Shared Properties in Islamic Finance. *Islamic Economic Studies*, 23(2), 85–115. DOI:10.12816/0015021

Majdoub, J., and Mansour, W. (2014). Islamic equity market integration and volatility spillover between emerging and US stock markets. *The North American Journal of Economics and Finance*, 29, 452-470. <https://doi.org/10.1016/j.najef.2014.06.011>.

Makni, R., Benouda, O., and Delhoumi, E. (2015). Large scale analysis of Islamic equity funds under different market conditions. *Research in International Business and Finance*, 34, 324-337. <https://doi.org/10.1016/j.ribaf.2015.02.014>.

Makni, R., Benouda, O., and Delhoumi, E. (2016). International evidence on Islamic equity fund performance persistence. *Review of Financial Economics*, 31, 75-82. [10.1016/j.rfe.2016.06.002](https://doi.org/10.1016/j.rfe.2016.06.002)

Mansour, A.A.Z., Ahmi, A., Popoola, O.M.J., and Znaimat, A. (2022). Discovering the global landscape of fraud detection studies: a bibliometric review. *Journal of Financial Crime*, 29(2), 701-720. <https://doi.org/10.1108/JFC-03-2021-0052>

- Meho, L.I. and Rogers, Y. (2008). Citation counting, citation ranking, and h-index of human-computer interaction researchers: A comparison of Scopus and Web of Science. *Journal of the American Society for Information Science and Technology*, 59(11), 1711-1726. <https://doi.org/10.1002/asi.20874>
- Mensi, W., Hammoudeh, S., Al-Jarrah, I.M.W., Ahmet, S., and Kang, S.H. (2017). "Dynamic risk spillovers between gold, oil prices and conventional, sustainability and Islamic equity aggregates and sectors with portfolio implications," *Energy Economics*, 67, 454-475. DOI: 10.1016/j.eneco.2017.08.031
- Mensi, W., Ur Rehman, M., Maitra, D., and Al-Yahyaee, K.H. (2020). Does bitcoin co-move and share risk with Sukuk and world and regional Islamic stock markets? Evidence using a time-frequency approach. *Research in International Business and Finance*, 53. 10.1016/j.ribaf.2020.101230
- Mirza, N., Abbas-Rizvi, S.K., Saba, I., Naqvi, B., and Haron, R. (2022). The resilience of Islamic equity funds during global financial crises. *International Review of Economics and Finance*, 77, 276-295. 10.1016/j.iref.2021.09.019
- Miskam, S. (2017). Issues in corporate and Shari'ah governance practices in Islamic financial institutions: What went wrong?, *Proceeding of 2nd International Conference on Law, Economics and Education (ICONLEE)*, eISBN: 978-967-2122-17-3, 13th -14th December 2017, Grand Bluewave Hotel Shah Alam, Malaysia. Moed, H.F., Burger, W.J.M., Frankfort, J.G. and Van Raan, A.F.J. (1985). The use of bibliometric data for the measurement of university research performance. *Research Policy*, 14(3), 131-149. doi: 10.1016/0048-7333(85)90012-5.
- Mohamad-Shafi, R. and Tan, Y.-L. (2023). Evolution in Islamic capital market: a bibliometric analysis. *Journal of Islamic Accounting and Business Research*, 14 (18), 1474-1495. <https://doi.org/10.1108/JIABR-04-2022-0106>
- Mongeon, P., and Paul-Hus, A. (2015). The journal coverage of Web of Science and Scopus: a comparative analysis. *Scientometrics*, 106, 213-228. <https://doi.org/10.1007/s11192-015-1765-5>.
- Muhammad, T., and Khalil, Z. (2021). The Role of Islamic Banks in Tackling Financial Exclusion in North-East Nigeria. *Turkish Journal of Islamic Economics*, 8(1), 87-110. DOI: 10.26414/A102
- Muharam, H., Anwar, R.J., and Robiyanto, R. (2019). Islamic stock market and sukuk market development: Do they promote economic growth? *Business: Theory and Practice*, 20, 196-207. <https://doi.org/10.3846/btp.2019.19>
- Musa, G.I., Bahari, Z., and Abdul-Aziz, A.H. (2020). The Impact of Islamic Capital Market on Malaysian Real Economy, *Jurnal Ekonomi Malaysia*, 54(2), 91-103.
- Mwamba, J. W. M., Ahmad, A., & Hamdan, M. (2017). Tail-risks in Islamic and equity markets. *International Journal of Emerging Markets*, 12(2), 231-248. <https://doi.org/10.1108/IJoEM-11-2015-0234>

- Naeem, M.A., Farid, S., Arif, M., Paltrinieri, A., and Alharthi, M. (2022). COVID-19 and Connectedness between Sustainable and Islamic Equity Markets. *Borsa Istanbul Review*, 23(1), 1–21. <https://doi.org/10.1016/j.bir.2022.06.001>
- Nagayev, R., Disli, M., Inghelbrecht, K., and Ng, A. (2016). On the dynamic links between commodities and Islamic equity. *Energy Economics*, 58, 125-140. <https://doi.org/10.1016/j.eneco.2016.06.011>
- Pesta, B., Fuerst, J. and Kirkegaard, E.O.W. (2018), “Bibliometric keyword analysis across seventeen years (2000-2016) of intelligence articles”, *Journal of Intelligence*, 6 (4), 1-12. doi: 10.3390/jintelligence6040046.
- Powell, K., and Peterson, S. (2017). Coverage and quality: A comparison of Web of Science and Scopus databases for reporting faculty nursing publication metrics. *Nursing outlook*, 65 (5), 572-578. <https://doi.org/10.1016/j.outlook.2017.03.004>.
- Radicchi, F., Castellano, C., Cecconi, F., Loreto, V., and Parisi, D. (2004). Defining and identifying communities in networks, *Proceedings of the National Academy of Sciences*, 101(9), 2658–2663. www.pnas.org/cgi/doi/10.1073/pnas.0400054101
- Shahzad, S.J.H., Mensi, W., Hammoudeh, S., Rehman, M.U., and Al-Yahyaee, K.H. (2018). Extreme dependence and risk spillovers between oil and Islamic stock markets. *Emerging Markets Review*, 34, 42-63. <https://doi.org/10.1016/j.ememar.2017.10.003>.
- Tan, Y. L., & Shafi, R. M. (2021). Capital market and economic growth in Malaysia: the role of sukūk and other sub-components. *ISRA International Journal of Islamic Finance*, 13(1), 102-117.
- Tanin, T. I., Ahmad, A. U. F., & Muneeza, A. (2023). Shariah-compliant equities and Shariah screening: need for convergence of ethical screening of stocks with Shariah screening. *International Journal of Emerging Markets*, 18(2), 296-315.
- Wang, X. and Li, R. (2014), “Collaboration network and pattern analysis: case study of dye-sensitised solar cells”, *Scientometrics*, 98(3), 1745-1762, doi: 10.1007/s11192-013-1180-8.
- Xu, L.D., Xu, E.L., and Li, L. (2018). Industry 4.0: state of the art and future trends, *International Journal of Production Research*, 56(8), 2941-2962, DOI: 10.1080/00207543.2018.1444806
- Zakaria, R., Ahmi, A., Ahmad, A. H., Othman, Z., Azman, K. F., Ab Aziz, C. B., Ismail, C. A. N., and Shafin, N. (2021). Visualising and mapping a decade of literature on honey research: a bibliometric analysis from 2011 to 2020. *Journal of Apicultural Research*, 60(3), 359–368. <https://doi.org/10.1080/00218839.2021.1898789>
- Zouari, S.B., & Taktak, N.B. (2014). Ownership structure and financial performance in Islamic banks: Does bank ownership matter? *International Journal of Islamic and Middle Eastern Finance and Management*, 7, 146-160.