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Understanding the Screening Criteria for Shariah-Compliant Stocks

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Abstract

Islamic finance operates as an alternative system meeting the investment requirements of individuals adhering to Islamic beliefs. While conventional finance prioritizes stock exchanges facilitating small-scale investments, challenges arise for Muslims investing their savings in stocks due to potential conflicts between companies' activities and revenues and religious principles. This situation prompts Islamic scholars to deliberate on the permissibility of purchasing specific company stocks. Various scholars and Shariah boards have established precise criteria for determining the permissibility of buying a company's stocks, leading to the development of indexes aimed at identifying compliant companies. Shariah-compliant stocks or companies adhere to the principles of Shariah law, governing various life aspects, including financial and economic activities. This study investigates Shariah screening methods, exploring their rationale, foundations, and potential religious influences, particularly focusing on six prominent Islamic indices. The study investigates Shariah justifications and motives behind these methods, discussing their evaluation through different standards. Despite scholars' varying opinions and evolving methodologies, the primary objective remains consistent: to facilitate halal income for Muslim investors while maintaining Islamic ethical principles in financial practices.

Keywords

Islamic Finance, Screening Methods, Shariah-compliant Stocks, Islamic Indices

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Şer'i Uyumlu Hisse Senetlerinin İzleme Kriterlerini Anlamak

Öz

İslami finans, İslami inançlara sahip bireylerin yatırım ihtiyaçlarını karşılayan alternatif bir sistem olarak faaliyet göstermektedir. Geleneksel finans, küçük ölçekli yatırımları kolaylaştıran borsalara öncelik verirken, şirketlerin faaliyetleri ve gelirleri ile dini ilkeler arasındaki olası çatışmalar nedeniyle Müslümanların tasarruflarını hisse senedine yatırmasında zorluklar yaşanıyor. Bu durum İslam alimlerini belirli şirket hisselerinin satın alınmasının caizliği konusunda düşünmeye sevk etmektedir. Çeşitli akademisyenler ve Şer'i kurullar, bir şirketin hisselerini satın almanın caiz olup olmadığını belirlemek için kesin kriterler belirlemiş ve bu da uyumlu şirketleri belirlemeyi amaçlayan endekslerin geliştirilmesine yol açmıştır. Şer'i uyumlu hisse senetleri veya şirketler, mali ve ekonomik faaliyetler de dahil olmak üzere hayatın çeşitli yönlerini düzenleyen Şeriat hukukunun ilkelerine uyarlar. Bu çalışma, özellikle öne çıkan alti İslami endekse odaklanarak, şeriat tarama yöntemlerini, gerekçelerini, temellerini ve potansiyel dini etkilerini araştırıyor. Çalışmada bu yöntemlerin ardındaki şeriat gerekçeleri ve saikler araştırılıyor ve bunların farklı standartlar üzerinden değerlendirilmesi tartışılıyor. Akademisyenlerin farklı görüşlerine ve gelişen metodolojilerine rağmen temel amaç tutarlı kalıyor: Finansal uygulamalarda İslami etik ilkeleri korurken Müslüman yatırımcılar için helal geliri kolaylaştırmak.

Anahtar Kelimeler

İslami Finans, İzleme Yöntemleri, Şer'i Uyumlu Hisse Senetleri, İslami Endeksler

Introduction

In Islamic practices, individuals or investors always seek to generate income or participate in transactions that are interest or Riba-free, which is prohibited in Islam. Therefore, Muslim scholars all over the world conclude on establishing Shariah-based companies or stocks that follow the rules of the Holy Quran as well as the teachings of the noble Prophet Muhammed (SAW) by engaging in a procedure called the screening procedure. The screening procedure is crafted to pinpoint elements that contradict the principles and directives of Islamic law and principles that are gotten from the Quran and the teachings of Prophet Muhammad. Islamic law forbids activities such as gambling, interest (Riba), and uncertainty (Adam & Bakar, 2014). These features are available in most of the traditional financial products and services, which is considered prohibited and a grave sin for Muslims engaging in it directly or indirectly.

Shariah-compliant stocks or companies are those that follow the principles and guidelines of Shariah law, which governs various aspects of life, including financial and economic activities (Securities Commission Malaysia, 2018). According to Alhabshi (2008), firms' stocks must be either permissible or impermissible according to the Shariah. However, since global financial system is based on conventional financial institutions and instruments, it is hard to find a firm that fully adheres to and complies with the rules of Shariah (Adil et al., 2013). In addition, a wide range of regulatory bodies and Shariah authorities, Islamic financial organizations, standardization bodies, and individual Shariah scholars have been engaged in discussions on these issues with a view to finding viable solutions that are safe from this problem. On the basis of these solutions, in order to establish whether a company's shares comply with Sharia law, specific criteria have been established for Islamic capital market indices around the world (Md. Hashim et al., 2017). Some of these indices are shown in the Table below.

Table 1: A List of Selected Islamic Indices.

Abbr.	Indices	Calculation	Markets
DJIAP	Dow Jones Islamic Market Asia/Pacific Index	Dow Jones	Asia Pacific
DJICHM	Dow Jones Islamic Market CHIME 100 Index	Dow Jones	China, India, MENA
DJLEMG	Dow Jones Islamic Market World Emerging Markets Ind	Dow Jones	Global
DJVEU	Dow Jones Islamic Market Europe Index	Dow Jones	Europe
DJIGCC	Dow Jones Islamic Market GCC Index	Dow Jones	GCC Countries
DJIGRC	Dow Jones Islamic Market Greater China Index	Dow Jones	China
DJIM	Dow Jones Islamic Market World Index	Dow Jones	Global
DJIMTR	Dow Jones Islamic Market Turkey Index	Dow Jones	Türkiye
IMXL	Dow Jones Islamic Market Titans 100 Index	Dow Jones	Global
SHE	S&P Europe 350 Shariah	S&P	Europe
SHJ	S&P Japan 500 Shariah	S&P	Japan
SHX	S&P 500 Shariah	S&P	Global
SPOIC5OP	S&P/OIC COMCEC 50 Shariah	S&P	OIC Countries
SPSGLOB	S&P Global 1200 Shariah	S&P	Global
FBMS	FTSE Bursa Malaysia EMAS Shariah Index	FTSE	Malaysia
SWCHN	FTSE Shariah China Index	FTSE	China
DFSJ SP	Daiwa FTSE Shariah Japan 100	FTSE	Japan
KAT5O	Participation Index 50	Borsa İstanbul	Türkiye
KATLM	Participation Index 30	Borsa İstanbul	Türkiye

Source: (Saraç et al., 2020)

The research problem that is being discussed in this study is the problem of poor understanding on Shariah screening methods used for stocks, especially as it pertains to the most well-known six Shariah Indexes. This research aims to explain the criteria and justification for monitoring Shariah- compliant stocks, as well as to provide an in-depth analysis of cleansing processes utilized by these indexes concerning revenues from firms' shares.

The importance of this research lies in its contribution to help bridge a significant gap in the literature. Currently, there is a lack of studies that explore in-depth the Shariah screening methods for stocks and the underlying Shariah justifications for these methods. By addressing this gap, the study attempts to provide scholars, stakeholders, and practitioners in the Islamic finance industry with a better understanding of Shariah-compliant stock selection, principles, logic and foundations.

The primary research question guiding this study is: What are the criteria and rationale behind the Shariah screening methods used for stocks, and how do the most popular six Shariah Indexes implement cleansing processes for revenue generated from firms' stocks? In order to answer this question, the study seeks to provide useful insights that can shape future research, investment decisions as well as helping in development of a more effective and transparent Shariah-compliant investment process. Additionally, this article will also discuss the role of Shariah scholars.

Literature review

Numerous research examined the discrepancies among the main Shariah screening methodologies used worldwide and the underlying assumptions that guide these evaluations. Many arguments have been raised about the fundamental sources of law and, consequently, the foundation utilized in the context of Shariah screening technique assessments.

Ho (2015) conducted an assessment of the Shariah screening techniques employed by 34 leading global Islamic indices. This comparative analysis aimed to underscore the distinctions in Shariah-compliant methodologies and principles adopted by these institutions. Most of these indices employ a dual (qualitative and quantitative) screening approach. Within the quantitative screening, there exist slight variations in the permissible threshold ratios for non-compliant criteria among these indices. The study recommends the establishment of universally accepted and globally applicable Shariah standards for methodologies within the global Islamic financial market.

Shariah screening approaches now in use are inconsistent when it comes to differentiating between haram and halal, as demonstrated by Derigs & Marzban's (2008) analysis of the effects of applying alternative Shariah screening methods on the resultant universe of halal assets. Several assets are categorized as haram or halal for each index, but they are categorized differently for other indexes. This suggests that the process of converting the descriptive Shariah law into a set of verifiable investing guidelines is not well understood or agreed upon.

Yildirim & Ilhan (2018) examined the primary Shariah sources to see whether any particular advice could be used to develop a novel Shariah screening process for future standardization. One possible way to harmonize Shariah screening procedures is provided by this study. A new approach for explaining the reasoning behind financial screening criteria is offered along with a review of the literature addressing the issues. There are just two main areas of complaint for the existing Shariah screening methods: the financial ratio and the threshold criteria.

Owing to the importance of AAOIFI and the widespread adoption of its criteria, Habib & Ahmad (2017) described the Islamic jurisprudential justification for AAOIFI's Shariah screening standard for stocks. This study proposes to eliminate the unnecessary filters and add a new, more relevant, and robust filter to AAOIFI's criteria. It is anticipated that the recommendations provided by this study will facilitate the harmonization of the diverse Shariah screening standards that have been implemented by various countries, organizations, or index providers worldwide.

A framework for using Islamic legal methodology's tenets to ascertain the best Shariah screening requirements for Islamic equities markets was presented by Rizaldy & Ahmed (2019). An effective regulation that may be applied by Indonesia's central Shariah board to maximize investors' risk-adjusted returns is recommended based on empirical facts about the performance of certain portfolios. It contends that Maslahah Mursalah is a suitable technique for determining suitable financial standards, and its tenets state that the benchmark should be selected based on which investors would receive the highest financial returns.

Kasi & Muhammad (2016) investigated the Shariah screening procedures used in the US and a few Asian nations. Concerning practicality, duration, financial sustainability, and need for funding, there are parallels and divergences throughout the Shariah screening mechanisms. The screening processes for Shariah that are suggested in the US are significantly stricter than those that are implied in the chosen Asian nations. Globalizing the application of rigorous and consistent Shariah laws is probably going to help all Muslim countries, as it will improve mutual understanding, social contact, and economic cooperation between them.

The rationale for the current Shariah screening technique employed by the Kuala Lumpur Shariah Index, which deviates from other significant Shariah screening methodologies globally, was provided by Ayedh et al. (2020). Five people who are involved in the KLSI Shariah screening technique were interviewed as part of this study to learn more about the goal of publicly listed companies in Malaysia to be granted Shariah-compliant status. This study offers some suggestions for future development, particularly concerning the evaluation of Shariah screening methods.

Due to qiyas being an individual interpretation made by a Muslim scholar or a collective of scholars, Ashraf & Khawaja (2016) emphasized the disparities arising from these interpretations and investigated their implications on portfolio construction and performance. As the origin of qiyas remains consistent across all standards, the possibility of achieving a consensus (Ijma) among Shariah scholars seems viable.

Akartepe (2022) showed practical reflections of Shariah screening methodological differences and revealed that criteria differ based on the index provider organizations, the composition and scope of the indices, the geographical locations of operation, and the Shariah advisory boards guiding the indices. The study also highlighted that the primary factor influencing this diversity is the variance in methodologies adopted by the Shariah advisory boards when rendering their judgments.

Akartepe (2022) explored two distinct methods for establishing thresholds: the minority-majority-centered approach and the necessity-centered approach. The research indicated that the former relies on Shariah evidence to establish thresholds for Shariah screening analyses, while the latter assesses necessity levels based on market data. However, the study reveals challenges associated with both approaches.

A thorough analysis of research examining the differences in widely used Shariah screening methodologies uncovers some inconsistencies and controversies. Together, these studies highlight the necessity of clear, consistent, and widely recognized Shariah screening methodologies to maintain uniformity and coherence throughout the Islamic financial environment globally.

Screening Criteria for Shariah-Compliant Stocks

Kasi and Muhammad (2016) examined a comparative analysis of the screening method between Asian countries (Indonesia, Malaysia, Singapore, and Hong Kong) with the screening criteria of the United States of America (USA) explained by the Down Jones method and argued that over the last 15 years, the US has been by far the most successful country in introducing and implementing present Shariah screening methodologies, i.e. sector-based screening as well as financial ratio screening.

The main criterion in Shariah screening methods involves eliminating firms whose main business elements are not compliant with Islamic teachings. When a firm's primary activities are compliant, but certain secondary activities are not, the scrutiny shifts to assess whether these secondary activities fall within the acceptable limits. One way to evaluate these secondary activities is by considering the proportion of revenue derived from them. This income percentage is significant not only for measuring a firm's compliance but also for determining the amount of profit that must be purified, which is crucial for Muslim investors who see earnings from impermissible activities as not clean and must be cleansed (Ayedh et al., 2019; Md. Hashim et al., 2017).

To analyze a firm's involvement in non-permissible secondary activities, the firm's financial operations must undergo scrutiny. As a result, Muslim investors are encouraged to know the components of a firm's business operation from the following approaches:

- The firm's general business operations; and
- The firm's financial activities.

The above approaches will be examined under each selected Shariah Index in the subsequent section of this article.

In this section, the screening criteria illustrated by the following Shariah indices will be analyzed; "Shariah Advisory Council (SAC) of Securities Commission (SC) Malaysia, ISRA-Bloomberg Shariah screening methodology, Financial Times Stock Exchange Shariah Index (FTSE), Standard and Poor's Shariah Index (S&P) criteria and Dow Jones Islamic Market Indexes (DJIM)."

Shariah Advisory Council (SAC) of Securities Commission (SC) Malaysia
The main objective of the SAC is to advise and give guidance about Shariah issues to the Islamic Capital Market in Malaysia. It was established to also regulate and supervise the operations of the financial Institutions in Malaysia. Furthermore, under the Capital Market Service Act of 2007, the SAC will ascertain the classification of securities traded on Bursa Malaysia, assessing whether they meet the criteria for being deemed Shariah Compliant or Shariah non-compliant. (Hambali et al., 2010).

The SAC employs a two-stage quantitative approach, which uses the business operation threshold and the financial ratio threshold to determine the compliant status of listed instruments and securities according to Islamic law. Hence, the instruments might be labeled as permissible by Shariah if their enterprise activities and economic ratios are under those thresholds. Additionally, SAC also considers the qualitative approach, assessing how the public perceives or views the firm's activities by Islamic teachings.

According to the business activities benchmarks, the proportion of Shariah-prohibited operations to the firm's income and Profit before taxes (PBT) will be calculated and compared against the relevant business activities benchmark mentioned below (SAC, 2018);

I. The Five Percent (5%) Benchmark;
It applies to the following areas: traditional insurance, traditional banking and lending, gambling, alcoholic beverages, pork and related activities, non-halal food and drinks, entertainment contrary to Shariah principles, tobacco and its related activities, as well as interest earnings from traditional accounts and securities and instruments (including interest earnings awarded resulting from a court judgment), dividends from Shariah impermissible investments, and other operations deemed impermissible in line with Shariah standards as decided with the aid of using the SAC.

For the above-mentioned operations, the proportion of Shariah impermissible operations to the firm's income or firm's PBT must be below five percent.

II. The Twenty Percent (20%) Benchmark;
It applies to the following areas; stockbroking business, share trading, return earned from Shariah impermissible operations, and other operations deemed impermissible consistent with Shariah laws as decided by the SAC.

For the above-mentioned operations, the proportion of Shariah prohibited operations to the firm's earnings or PBT of the firm have to be below twenty percent.

According to the financial ratio threshold, SAC takes into consideration two ratios to screen out companies with huge debt, interest earned, and expenditure. Notably, the two financial ratios must be less than 33%, because they aimed to examine Riba and Riba-based components within a firm's statement of financial position. These ratios are stated below;

I. Cash over total assets:
Cash refers solely to funds held in interest-bearing traditional accounts and instruments, excluding cash held in Islamic accounts and securities from the computation.

II. Debt over total assets:
Debt only consists of interest-bearing debt excluding Islamic financing or Sukuk from the computation.

ISRA-Bloomberg Shariah Screening Methodology

ISRA, started in 2008 by Malaysia's Central Bank, is a well-known Islamic finance and Shariah research group around the world. It is famous for its work and has more than 200 publications including textbooks, articles and research papers. These are very important in the sector. On the other hand, Bloomberg was created by Michael Bloomberg in 1981. It's a private financial company that also makes software and media. Its main office is located in New York City. It has a set of money software tools, stats and trading places for finance groups. Plus a big media presence that includes worldwide TV shows, radio stations, websites, newsletters and magazines to give people all the financial facts they need. (Bursa, n.d).

The ISRA-Bloomberg has two approaches which are industry and operation-based screening, just like other screening methodologies. These approaches segregate the firms having non-compliant business activities and also focus on firms with mixed elements. This segregation ensures that the non-compliant secondary operations are within the tolerable threshold, captured by the earnings generated from such operations. According to the prevailing standards and customs of the market, the guideline indicates that the earnings from such operations should be below five percent of a firm's overall income, referred to as revenue (Md. Hashim et al., 2017).

It is essential to note that the threshold of five percent is crucial to indicate that the Shariah impermissible operations of the firm are small and that the total participation of investors in the firm is not to be regarded as contributing to the upturn of the prohibited activities of the firm. This goes with most of the criteria currently used to screen Shariah stocks. For instance, AAOIFI (2015) Shariah Standard No. 21 states;

"That the amount of income generated from prohibited component does not exceed 5 percent of the total income of the corporation irrespective of the income being generated by undertaking a prohibited activity, by ownership of a prohibited asset or in some other way" (AAOIFI, 2015).

Furthermore, the unique feature of the criteria of ISRA-Bloomberg is the fact that the index lists the level of impermissible operations of firms. The index did not only list the firms as Shariah-compliant firms but also stated the level of revenue from prohibited operations. Company X, for example, may be listed as a Shariah-compliant firm with 3.5% of its revenue coming from Shariah-non-compliant operations (Ayedh et al., 2019). These additional features will benefit investors in two ways, namely;

- Better choices can be made regarding whether to purchase, retain, or divest stocks of Shariah-compliant firms that are close to the five-percentage benchmark.
- Determining the extent of dividend purification can be straightforward by relying on the publicly published percentage of revenue generated from operations that are not compliant with Shariah principles.

For better clarification under this Shariah index, companies are categorized into different colors to show the level of their Shariah compliance. The firms that are entirely Shariah Complaint are highlighted in white, firms that have mixed elements are shown in blue, and firms that are entirely non-compliant with Shariah principles are shown in red.

Furthermore, the firms are also subject to financial screening. Two financial ratios need to be met. These are cash-based ratios and debt-based ratios. It should be noted that these financial ratios complied with the method of SAC (2013) explained previously. However, this methodology utilizes market capitalization to compare the threshold against any time the value of the twenty-four-month market average exceeds the value of total assets. AAOIFI also supports this calculation. This rule is relevant to specific firms that work without possessing many tangible assets, such as Bolt & Uber that earn income primarily from assets owned by others (Md. Hashim et al., 2017). The 24-month average market value was chosen as it offers a more dependable and steady representation of the firm's worth, especially in periods of financial uncertainty or crisis.

Notably, the ISRA-Bloomberg approach has a unique feature compared to other Indexes because it is based on both the 24-month market average and total assets under specific situations to analyze the threshold against.

Financial Times Stock Exchange Shariah Global Equity Index (FTSE)

FTSE International Limited, also known as FTSE Russell is a British company that gives stock market indexes and related data services. The London Stock Exchange fully owns it. It runs the UK FTSE 100 Index and some other indexes. FTSE Russell, as an index maker, offers a wide variety of trustworthy and exact indices. These help investors assess and study international markets in all types of investments, styles or plans (FTSE, 2023).

To meet the upward movement request for Shariah-compliant investment options, FTSE has crafted an enhanced collection of Shariah indexes. These indexes employ an enhanced methodology and offer a wider range of Shariah index solutions tailored for investors who are Muslims. There are about nine different indices under the FTSE Shariah Index (FTSE, 2015). Yasaar Research Inc. conducts the screening process, after which FTSE handles the calculation and distribution of the indexes.

The screening process of this index is managed according to written approaches relating to Islamic law. Yasaar's Shariah Board has established these methods and oversees adherence to them. These Shariah approaches encompass two distinct elements: business operations and financial ratios (FTSE, 2015).

Business Activity: The primary sectors scrutinized in business activity screening involve traditional finance, alcoholic beverages, entertainment, tobacco, arms, and pork-related items. The company involved in any of these operations will be excluded and referred to as Shariah non-compliant (FTSE, 2023). The FTSE screening methodology involves excluding entire sectors that are not compliant but allows the inclusion of stocks from other sectors as long as, collectively, the contribution of non-compliant earnings is less than 5% of the total. This represents a more flexible approach to Shariah compliance within investment indices.

Financial Screening: Under this screening methodology, the financial ratios screening must be met before an enterprise can be considered a Shariah Compliant. FTSE considered the following ratios; Debt constitutes less than one-third (33.333%) of total assets, while cash and interest-bearing items represent less than one-third (33.333%) of total assets. Additionally, accounts receivable and cash collectively amount to less than half (50%) of total assets (FTSE, 2023).

Standard and Poor's Shariah Index (S&P) Criteria

Standard & Poor's, now called S&P Global Rating, is an American group that rates credit. They belong to a bigger company named S&P Global and they share information on shares of companies, bonds and things like metal prices. S&P is seen as the biggest of the three main credit rating agencies in the world. The S&P made the S&P Shariah Indices in 2006 because Shariah-compliant investment grew a lot (S&P, 2023).

This index examines the Shariah-compliant firms' performance from an existing S&P index (the "Underlying Index"). The S&P Shariah Dividend Indices examine the effectiveness of firms in the relevant Underlying Index that adhere to a managed-dividends strategy, consistently raising dividends annually for a minimum of three years and satisfying the specified liquidity criteria listed in the Eligibility Criteria (S&P, 2023). The weighting of the index constituent is determined by the indicated annual dividend (IAD) yield. The indices utilized Rating Intelligence Partners (RI) for Shariah screening, consisting of a group of Islamic intellectuals responsible for interpreting business matters and suggesting actions regarding business decisions pertinent to the indices.

The S&P Shariah Screening process involves the screening of the Underlying Index monthly for compliance based on the Shariah-based principles provided by RI. The rules is divided into two (S&P, 2023), which are;

- Sector-Based Screen
- Accounting-Based Screen

Sector-Based Screen: This includes the screening out of firms involved in business activities that are Shariah non-compliant such as tobacco, advertising of non-Islamic activities, gambling, media and entertainment (music), alcohol, financial services except Islamic financial services, pornography, pork related activities, cannabis and trading of gold and silver as cash on deferred basis (S&P, 2023). However, if a company earns below five percent of its total revenue from non-compliant activities, these earnings may be accepted, and the firm will be accepted to have qualified and passed the Sector-Based screens.

During the process of selection, each firm's recent financial statement is examined to make sure it is free from Shariah noncompliant activities; if available in quarterly, semi-annual, and annual frequencies, preference is given to the annually audited statement, and non-compliant firms are excluded, while industries engaged in Shariah noncompliant activities are considered impermissible to invest in by investors that are Shariah compliant (S&P, 2023).

Accounting-Based Screen: Additionally, after the elimination of firms engaged in non-compliant business activities, the remaining firms undergo continuous scrutiny to ensure compliance with the leverage ratio. This screening is not applied to firms whose business activities are fully Shariah compliant.

Stocks previously considered compliant can maintain their compliance in the current evaluation period even if they exceed the maximum leverage ratio, as long as it is within a two-percentage-point buffer. However, breaching the maximum for three consecutive periods and if the ratio exceeds the 2% point buffer limit results in the stock being considered impermissible immediately.

Similarly, stocks previously considered impermissible and passed the current accounting-based screening remain impermissible if the ratio is within 2% points of the highest allowed. However, if the ratio is satisfied for three simultaneous periods of evaluation, the stocks will be considered Shariah-compliant (S&P, 2023).

Leverage formula:

Debt / Market Value of Equity (36-month average) < 33 %

Dividend Purification Ratio:

Dividends x (impermissible Revenue/ Total Income)

Generally, to be qualified in the index, shares initially form part of an underlying index, and the Shariah compliance screening process is applied to the underlying index, ensuring that only stocks meeting Shariah criteria are retained in the Shariah index.

Dow Jones Islamic Market Indexes (DJIM)

Dow Jones & Company was started in 1882 and it's one of the top financial news companies globally. The Dow Jones Islamic Market U.S. Index (DJIMI) is an Islamic stock market index that belongs to the family of Dow Jones Global Indexes (DJGI) and was launched in 1999. This group includes stocks from 34 countries and covers ten industries, eighteen business categories, fifty-one industry groups and ninety subdivisions as per the Dow Jones Global Classification Standard system. Like other Islamic indexes, DJIMI keeps out any stocks that don't follow Shariah rules. This helps to give a clear measure for stock market performance worldwide, helping investors and market pros that choose to use only what is right in Islam. DJIMI was one of the first groups to show how Shariah rules can be used in Islamic Capital markets (DJIM, 2023). The index was launched as a result of the non-existence of the global Islamic index and people who run Islamic investment funds were looking for a well-known group to make an approved Sharia benchmark and decide on the right investments. This helped them create investment products that follow Sharia rules. It is a leading index in establishing innovative indexes for developed and developing markets. Its objective was to become an Islamic finance benchmark (Khouildi et al., 2017). The indexes were created to screen out stocks that are not compatible with Shariah principles relating to interest and certain activity prohibitions (Shamsuddin, 2014). Moreover, following the index's launch in Bahrain in February 1999, several Islamic market indexes were introduced as components of the advancement in Islamic capital markets. These indices, spanning from the universe to regional focuses, implement Shariah screening criteria, ensuring that listed securities align with Shariah-compliant standards (Omar Farooq & Hasib Reza, 2014).

Furthermore, the index eliminates any industry sector that engages in activities not compatible with Islamic principles, such as tobacco, alcohol, pornography, pork, arms, hotels and leisure, gambling, and traditional financial services. As a result, for stocks to be eligible for the index, they must ensure they qualify for certain standards outlined in the criteria (Khouildi et al., 2017).

The Shariah stock screening methods of the index is subjected to qualitative and quantitative methods.

Qualitative Method: This method is based on the quality of services rendered by the firms. The index states that the firms' main activities must not be impermissible activities that contradict the principles of Shariah such as uncertainty, gambling, prohibited products, and interest. Moreover, the forbidden elements should only represent a small percentage of the business activity (Najib et al., 2014).

Quantitative Method: In this stage, the aim is to assess the portion of the firm's overall income contributed by activities deemed impermissible (Najib et al., 2014). The result from this assessment can make the Shariah bodies determine if a firm is Shariah Compliant or otherwise. This method is divided into two, namely; Activity Based and Financial Ratio Benchmarks.

Activity-based Benchmark: This stage seeks to assess the proportion of the revenue from impermissible operations to the whole revenue of the firm. First, the index eliminates the stock of firms that are engaged in impermissible activities such as alcohol, pork, unethical investments, and traditional financial sectors (Najib et al., 2014). As per the S&P Dow Jones report, revenue coming from Shariah impermissible operations (excluding interest) may be permissible in specific instances, following a 5% threshold. This benchmark aims to inform investors about the purification ratio (Khouildi et al., 2017).

(Non-permissible income / total revenue) x *100 < 5%*

Purification Ratio:

Dividends x *(Non-permissible income / total revenue)* x *100*

Noteworthy, several methodologies widely promote the adoption of the purification concept, the concept needs to be carefully calculated as the sinful earnings require purification through a combined computerized system and detailed manual research to ensure consistent screening outcomes.

Financial Ratio Benchmark:

This Index is stricter compared to other indexes like SAC of SC, it introduces different criteria using a variety of variables with the same benchmark of 33% as other indices (Khouildi et al., 2017). The three ratios were introduced by DJIM to identify firms with intolerable levels of revenue with interest.

- Total debt divided by average market capitalization. Total debts comprise short and long-term debts.

  (Debt / average market capitalization) x *100 < 33%*

- Cash and interest-bearing debts divided by market capitalization

  (Cash / average market capitalization) x *100 < 33%*

- Account receivables divide average market capitalization. It comprises Current receivables and long-term receivables.

  (Account receivables / average market capitalization) x *100 < 33%*

Borsa Istanbul (BIST) Participation Index
Under the sponsorship of four participation banks—Albaraka Türk, Kuveyt Türk, Bank Asya, and Türkiye Finans participation bank—the Participation Index began publishing in Türkiye on January 6, 2011. Borsa Istanbul provided the index calculation service, while Bizim Menkul Değerler Company and the Participation Banks Association of Türkiye handled the index consultancy (Ülev, 2016). This index has totally taken over by BorsaIstanbul in 2021. BIST commenced to calculate BIST Participation 30, BIST Participation 50, BIST Participation 100, BIST Participation All Shares, and BIST Participation Sustainability Indices commenced using closing prices as of October 1, 2021, and real-time prices as of November 12, 2021. The selection of companies for inclusion in the indices is carried out through collaboration with the Advisory Board affiliated with the Participation Banks Association of Türkiye. This process adheres to the published "Share Certificate Issuance and Trade Standard" established by the board. An information form is generated using the standard and guide to evaluate the eligibility of companies. During regular assessments to determine index constituents, the responses provided by the companies in the information forms are considered, aligning with the respective financial statement period.[1]

Qualitative Method: Prohibited activities, as defined by the standard, are screened through the company's articles of association. Shares of companies engaged in any prohibited activity are excluded. Some of these prohibited activities include the production and trade of alcoholic beverages, financial transactions involving interest, futures transactions with money and/or money-equivalent assets, and publications contrary to morality and Islamic values.

Quantitative Method: Company shares that passes the activity screening are subject to other screening criteria based on some ratios and permissible thresholds.

Activity-based Benchmark: This stage seeks to assess the proportion of the revenue from impermissible operations to the whole revenue of the firm. The proportion of earnings derived from prohibited activities within the total revenue must not surpass 5%.

(Non-permissible income / total revenue) x *100 < 5%*

Financial Ratio Benchmark: There are two ratios used by BIST participation index to identify firms with intolerable levels of interest-bearing debts and/or assets.

- Interest-bearing debts divided by the higher of average market value or total assets shall not exceed 33%.

1 For detailed information, see https://borsaistanbul.com/en/index/1/3/participation

(Interest-bearing debts / average market capitalization) x *100 < 33%*

or

(Interest-bearing debts / total assets) x *100 < 33%*

- Interest-bearing assets divided by the higher of average market value or total assets shall not exceed 33%.

(Interest-bearing assets / average market capitalization) x *100 < 33%*

or

(Interest-bearing assets / total assets) x *100 < 33%*

Basis of the Screening Criteria

The principles of Islamic finance is an integral component of Shariah law. Islamic Finance is ethical-based, together with being fair, transparent, and honest among others, which is enhanced by different Islamic principles. The basic principles of Islamic finance are established mainly from the Islamic view of money which is the prohibition or impermissibility of interest (Gamaleldin, 2015).

In the commencement of Islamic finance, due to the fact that investments or business activity were generally fully operated on Islamic law or there was no issue of Shariah compliance as it is only Muslims participated in the business, the screening process was not necessary. However, in the Islamic commercial space, there are now instances of joint businesses or partnerships involving collaboration between Muslim and non-Muslim investors engaged in diverse business operations. Before participating in such joint businesses, the investors who are Muslim must make sure that engaging in such operations or businesses aligns with Islamic law (Adam & Bakar, 2014; Bakar, 2010).

The increasing awareness among investors, who are Muslims seeking opportunities in modern stock markets, has been a significant factor driving the evolution of screening methodologies. The extensive engagement with conventional banking systems based on interest has diverted Muslims away from the stock market. Some intellectuals view this trend as a substantial loss for Muslims, as the stock market holds the potential for generating good income. As a result of this situation, in 1987, intellectuals among Muslims gathered and established a methodology that permits Muslims to earn permissible (halal) revenue through investing in the stock market (Md. Hashim et al., 2017).

Role of Shariah Scholars

Asking for direction from the Islamic intellectuals has been one of the significant aspects of Muslims' lives in terms of religious practice as well as everyday life affairs. Given the situations faced by Muslim investors, Islamic scholars, regulatory agencies, and Islamic finance participants acknowledged the need to establish criteria or methodologies for screening stocks according to Islamic principles. These criteria aim to assist Muslim investors in identifying shares that meet the specified conditions explained in the criteria (Md. Hashim et al., 2017). The informal discussions have resulted in the formulation of an approved methodology endorsed by religious scholars, and this approach has gained widespread global adoption. In the context of economic doings, obtaining guidance from Shariah Intellectuals is paramount when assessing the permissibility of operations like investments or business partnerships (Adam & Bakar, 2014).

Laldin (2008), described Shariah advisor as "jurists specializing in fiqh al-muamalat and Islamic finance, entrusted with the duty of directing, reviewing and supervising the activities related to Islamic finance, to ensure that they comply with Shariah rules and principles". This description is parallel with AAOIFI's description of Shariah supervisory board members in the Islamic financial institutions (IFIs), as they need to be specialized in fiqh al-muamalat but some of them could be Islamic finance experts with a knowledge of fiqh al-muamalat (AAOIFI, 1997).

Furthermore, some Shariah scholars state that stock of firms can be divided into according to the firms' functions and operations (Gamaleldin, 2015). They are;

- Stock of firms with non-prohibited functions and operations. The stocks of these firms can be acquired.
- Stock of firms with purely impermissible functions and operations. The stocks of these firms cannot be acquired.
- Stock of firms with mixed elements of both permissible and impermissible operations. There are various opinions of scholars concerning investment in this type of firm.

All the Shariah scholars agreed on the first two types of firms. However, there are different opinions on the third type.

According to El Qaradawi, the "permissibility and absence of prohibition principle", explains that all operations are permissible unless explicitly prohibited by Quran or Sunnah; he emphasizes that prohibitions are aimed at avoiding harm, impermissible transactions are inadmissible, good intentions do not justify illicit transactions, impermissible acts are universally prohibited. He further explained that urgent need allows prohibited transactions only to the extent needed to outgrow suffering, with borrowing interest-bearing loans considered permissible only under the real State of Necessity and should be avoided whenever possible (Gamaleldin, 2015).

The primary concern revolves around investing in companies engaged in mixed activities. On one side, involvement implies association with impermissible business, while on the other, restricting participation would result in harm to the public and create hardship. As a result, many Shariah authorities, committees, standard-setting agencies, and individual intellectuals advocate allowing participation in companies engaged in mixed activities, emphasizing the principle of alleviating hardship and danger for Muslim investors, as long as the prohibited business and activities of such firms are limited within a permissible point (SAC, 2013).

Some modern scholars, drawing on Ibn Taymiah's analysis, distinguish between two types of prohibited transactions: those inherently banned, such as pork or tobacco, and those forbidden based on how they are earned, like money or barley, which, if earned improperly, should have the impermissible portion purified while the permissible portion remains fungible; these scholars argue that, as an exception, shares of certain companies with interest-bearing transactions can be invested in and traded, considering the prevalence of such transactions and societal needs, subject to meeting specific qualitative and quantitative criteria established by Shariah boards or scholars. Their main basis for argument is derived from various principles of jurisprudence, serving as guidelines for forming opinions on contemporary transactions.

The principles include the following:

- **"Hardship begets facility"** Nadwi (1999): "Once a matter becomes narrowed, gates of easiness are opened". This principle is one of the fundamentals of dealing in mixed shares. It is backed by the Quran and Prophet Mohamed's (PBUH) Sunnah from which the subsequent references:
  "*Allah intends for you ease and does not intend for you hardship* (Quran, 2:185)"
  "*And Allah wants to lighten for you [your difficulties]; and mankind was created weak* (Quran, 4:28)"
- **"General need takes the status of necessity"** (Gamaleldin, 2015; Nadwi, 1999):"The need does not justify committing prohibited transactions unless there is a necessity which is limited by strict conditions". The necessity alleviates constraints on stocks of companies with mixed activities, relying on the principles of "general tribulation" & and "removing hardship." However, if other Islamic options are present, the necessity is now invalid.
- **"The principles of minimal versus large and predominance and dependence in Islamic Jurisprudence."** The latter states the reason behind the benchmark ratio established in the screening methodology:

"The principle of minimal versus large": within the impermissibility of interest, certain asset transactions, such as those involving cash and debt, face restrictions to prevent the occurrence of interest-bearing transactions. The principle of "The majority has the ruling of all" states that "the minimal (little) portion follows the majority (large part) in its ruling" (Nadwi, 1999). Hence, when cash and debts are combined with other assets, they conform to the predominant rules of the majority of assets, with the determination of what constitutes a significant or majority share being subjective. It is considered met when assets other than cash and debts exceed 50%, or when cash and debts do not constitute a large portion (Gamaleldin, 2015).

Role of Quran and Sunnah

The primary sources for screening methods and approaches are the Quran and Sunnah. Nonetheless, Quran and Sunnah do not explicitly mention the quantitative approaches. For example, the establishment of thresholds for financial ratios was based on ijtihad (reasoning by competent Shariah intellectuals) and Shariah statements unrelated directly to capital markets (Zainudin et al., 2014).

The rationale for implementing a Shariah screening method is to regulate and limit the Shariah non-compliant operations of a firm, thereby limiting the involvement of investors especially Muslims in such operations (Md. Hashim et al., 2017). This is intended to minimize collaboration in unethical deeds, a crucial principle derived from the following Quran verse:

Allah says: "*Do not help one another towards sin and hostility*" (Qurʾan, 5: 2)

A Muslim investor should not engage or invest in firms that its whole business operations are non-compliant according to Shariah principles. Allah says in the Quran:

"*Oh you who believe, do not wrongfully consume each other's wealth, but trade by mutual consent*" (Qur'an, 4: 29)

Ibrahim (2012) cited one hadith of the Prophet (SAW) saying that "One-third is big or abundant (plenty)" (Tirmidhi) as a rationale for adopting a one-third benchmark, anything below this measure is deemed small or negligible. Conversely, he held the belief that a ratio exceeding 70% represents the highest in the context of cash and account receivables concerning the ratio of total assets. This research aimed to address the benchmark's rationale but did not delve into it.

Furthermore, According to Ayedh et al. (2019), the qualitative indices can be divided into two aspects which are 30% or one-third (33.33%). The percentage primarily originates from the Shariah guideline concerning principal assets, sourced from the narration by Saad Abi Waqas of a hadith from the Prophet;

"*I became seriously ill at Mecca and the Prophet came to visit me". I said, "O Allah's Messenger! I shall leave behind me a good fortune, but my heir is my only daughter; shall I bequeath two-thirds of my property to be spent in charity and leave one-third (for my heir)?" He said, "No." I said, "Shall I bequeath half and leave half?" He said, "No." I said, "Shall I bequeath one third and leave two* *thirds?" He said, "One third, and one third is much."* "(Hadith No.5659, Imam Bukhari)."

It can be derived from the above hadith that the exact percentage mentioned is one-third or equivalent to 33.33%. Conversely, most of the indices are using a 30% benchmark for the qualitative threshold. For liquidity ratio, the permissible benchmarks accepted were different and this depends on principles of Shariah on primary assets as outlined in the following hadiths of the prophet;

"*When a person buys a palm grove after pollination, then the fruit is for the seller unless the buyer stipulates this too* (Hadith No.2204, Imam Bukhari)."

"*When a person buys a slave, who has wealth, then the wealth is for the seller unless the buyer stipulates this too* (Hadith No.2379, Imam Bukhari)."

However, different academic studies have scrutinized the screening criteria set by different Islamic indices, stating several criticisms and recommendations (Yildirim & Ilhan, 2018; Habib & Ahmad, 2017). Khatkhatay and Nisar (2007) contested the use of market capitalization in the DJIMI criteria, proposing total assets as a more rational measure and calling for a strict threshold on debt and liquid assets ratios. Derigs and Marzban (2008) conducted a comparative survey of nine Islamic indices, revealing discrepancies in screening methodologies that could lead to varying outcomes for company eligibility. Htay et al. (2013) criticized the non-consistence among indices, expressing concerns about its negative impact on investors who are Muslims. Sani and Othman (2013) compared SAC and MSCI criteria, advocating for the uniqueness of different screening methodologies. Zandi et al. (2014) examined SACSC-approved stocks against DJIMI, MSCI, and S&P criteria, recommending changes in Malaysian screening criteria. Additionally, a debate arose regarding the interpretation of the Hadith stating "one-third is big," used as justification for the 33% threshold in quantitative screening, where El Baaly and Yaqoubi expressed differing opinions in a 2015 interview (Gamaleldin, 2015). El Baaly makes clear that putting money into mixed companies should be a rare situation treated according to the main goals of Shariah law. He underlines the need for input from finance and accounting researchers when making screening criteria. El Baaly does not like the idea of making exceptions beyond the limited scope already established. He thinks that finance experts should justified whether these limits are based on study and research. He puts special emphasis on "Materiality" and "Operating Segments" as important standards to follow. On the other hand, Sheikh Nizam Yaqoubi, a significant figure in Islamic finance, especially stock screening, contributed to establishing the first Shariah-compliant stock index with the Dow Jones Fatwa. He discussed the historical context of stock screening, originating from young Muslims' interest in trading during the dot-com bubble. Yaqoubi couldn't individually assess each company's status due to the extensive analysis required, proposing general criteria instead. He highlights the need for an Islamic Financial Stock Market fully aligned with Shariah principles, rejecting exceptions for new companies engaging in interest-based borrowing. Yaqoubi advocates for expanding the base of permissible stocks and encouraging ethical Islamic Finance practices, aiming to enhance community prosperity by replacing unethical transactions with positive screening criteria that benefit society (Gamaleldin, 2015).

Note that the diverse opinions of Shariah scholars can be viewed as a result of the "complexity of transforming the historical and verbal Shariah sources into quantifiable and formal guidelines to be used inside a contemporary-day tenet assessment and portfolio control system" (Zainudin et al., 2014). Therefore, Shariah screening methodologies vary and change over time among users of the screening process.

Religious Influences and Inspiration

Islamic Finance applications and practices of contemporary times originated in the early 1960s. Dr. Ahmed Abdul-Aziz El-Naggar's establishment of the Savings Bank in Mit Ghamr, Egypt, in 1963 is regarded as the inaugural endeavor to introduce the principle of profit sharing, known as the "Profit Participation Principle", in banking financial engagements as an alternative to Riba (Interest) (Omar et al., 2013). Dr. El Naggar's experimental model featured a social initiative known as "the Social Service Fund" integrated within the Bank's structure, aiming to drive socio-economic improvement and development within local societies (El Naggar, n.d., pp. 6-13). The framework was developed in the 1970s. The first bank to be named Islamic was the "Islamic Development Bank" in 1973 (IDB, 2013). Numerous Islamic banks emerged following the surge in oil prices in 1973. This concept gained attraction from investors, leading Islamic Financial Institutions to accumulate significant funds directed towards investment in alignment with the Principles of Islam. The management of Shariah-compliant funds experienced a substantial increase owing to the announcement of Shariah-non-prohibited equity funds and Sukuk, as a rising array of financial organizations responded to investors' demands by offering Shariah-compliant fund options (Shanmugam & Zahari, 2009).

Bengtsson (2008) argued that the Methodist Church in the United Kingdom (UK) initiated an ethical fund in 1960, though it is limited to specific groups, and noted that Sweden's AktieAnsvar Aktiefond, established in 1965 by "the Temperance and dissenting Baptist movements", was the first public-access ethical investment fund. This fund employed negative screening, excluding alcohol, firearms, and tobacco from its portfolio. However, according to some studies (Gamaleldin, 2015; Md. Hashim et al., 2017; Omar et al., 2013), the practice of Islamic Finance practices and applications commenced as early as the 1960s and the prohibition of non-permissible elements has been the fundamentals of Islamic principles.

Conclusion

The evolution of Shariah-compliant finance stands as proof of the enduring principles of Islamic law and ethical finance. Originating in the prohibition of interest and ethical considerations, Islamic finance has gone through a remarkable transformation. At first, the absence of explicit Shariah compliance screening was justified by the mainly Islamic nature of business operations. However, as the landscape became widespread, the transactions between Muslim and non-Muslim partners in different ventures started, therefore, making the need for screening methodologies necessary. This marked the beginning of various screening methodologies aimed at aligning business activities with Islamic principles while enabling Muslim participation in modern stock markets. Additionally, this result bridge the gap stated in the studies Ayedh et al. (2020); Habib & Ahmad (2017), which emphasizes on the harmonization of the diverse Shariah screening standards that have been implemented by various countries, organizations, or index providers worldwide and also to learn more about the goal of publicly listed companies in Malaysia to be granted Shariah-compliant status.

The important role of Shariah scholars in formulating these screening methodologies cannot be left out and overstated. The guidance provided by them and also drawing injunctions from Quran and Hadiths, has been essential in outlining permissible benchmarks and ethical considerations. The Quran emphasizes fair trade, avoidance of sin, and mutual agreement in business activities, providing the ethical foundation for Shariah compliance in financial activities. Additionally, Hadiths detailing specific percentages, such as one-third (33.33%), offer guidance for permissible portions, further shaping the screening criteria. Furthermore, it is suggested that comparative analysis of the roles and impacts of Shariah scholars in different regions or countries should be done to understand regional variations in Shariah compliance practices; perspectives on various stakeholders including investors, financial institutions, Shariah scholars and regulators can be investigated to know their perception about the needs as well as challenges associated with sharia compliant investment and its implications for society, economy, and governance.

Contemporary Islamic finance traces its roots to the 1960s, evolving significantly with Dr. Ahmed Abdul-Aziz El-Naggar's early initiatives and the subsequent establishment of Islamic financial institutions. These institutions responded to global demand, offering ethical and Shariah-compliant investment platforms. The emergence of Shariah-compliant funds and banks has made Islamic finance an important player in the global financial landscape. However, the evolution of screening methodologies has not been without its challenges. Among the important issues is the difference of opinion between Shariah scholars on some financial activities, such as those that have mixed elements from permissible and impermissible operations. The debates of quantitative thresholds and the understanding of religious texts have resulted in varying screening criteria among Islamic indices and financial institutions. This lack of harmonization presents difficulties for investors in search of clarity and uniformity in Shariah-compliant investments.

Further, the swift developments of Islamic finance and its incorporation into the global capital market have emerged questions about the applicability of conventional rules to contemporary financial instruments and operations. As Islamic financial institutions diversify their portfolios to cater for the needs of a global market place, it is essential that scholars, regulators and industry actors engage in constant dialogue and cooperation to ensure the validity and efficacy of Shariah-compliant finance.

Additionally, despite the differences in opinions of scholars and the evolving nature of methodologies, the main goal remains consistent: to facilitate halal income for Muslim investors while upholding Islamic ethical principles in financial practices. This journey underscores the enduring relevance and adaptability of Islamic finance principles in a dynamic financial world.

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