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The study aims to enhance the current Shariah stock screening methodologies by proposing a scoring mechanism that assigns a measurable Shariah Compliance Degree (SCD) to listed scripts. This approach seeks to simplify the assessment process, enabling investors to compare and make informed decisions based on the relative level of Shariah compliance. A descriptive research methodology is employed to analyze the limitations of existing Shariah stock screening criteria, such as those used by Dow Jones, AAOIFI, MSCI, FTSE, S&P, and KMI-30 in Pakistan. The study develops a scoring mechanism that consolidates qualitative and quantitative criteria into a single percentage representing the level of Shariah compliance of each script. The proposed SCD framework addresses a critical limitation of the KMI-30 Index by providing a a more detailed assessment of compliance levels for listed stocks. Unlike the binary categorization of "compliant" or "non-compliant," the SCD framework assigns specific compliance scores, reflecting varying degrees of adherence to Shariah principles. For instance, while both POL and Meezan Bank are compliant under the KMI-30 Index, SCD assigns POL a 95% compliance score and Meezan Bank 100%, offering stakeholders greater clarity in their investment decisions. This enhancement promotes transparency, encourages ethical investment, and motivates companies to achieve higher compliance standards. This study introduces an innovative scoring mechanism for Shariah stock screening results, which enhances the existing methodologies by providing a measurable and comparative degree of compliance. This approach offers a more transparent and practical tool for investors, thereby promoting greater participation and growth in Islamic capital markets.

Keywords: Equity market, Islamic capital markets, KMI-30 Index, Pakistan Stock Exchange, Shariah compliance, Shariah stock screening criteria

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1. Introduction

In recent years, Islamic finance has gained significant attention of researchers. This interest is largely driven from outcomes of capitalist economy. It may be divided into two main groups those showing interest in Islamic financial markets: first, capitalists who have observed the shortcomings of the current global financial systems and are seeking a better alternative to mitigate the existing risks and downsides of the capitalist system. The second group comprises faith-based individuals who seek Shariah-compliant alternatives to ensure their financial dealings are free from Riba (interest), Gharar (uncertainty), and Qimar (gambling). A Muslim investor cannot participate or invest in companies with completely Shariah noncompliant business and operations (Md. Hashim et al., 2017).

"Oh you who believe, do not wrongfully consume each other's wealth, but trade by mutual consent" (Qur'an, 4: 29, Translation. Abdel Haleem, 2004).

With growing demand and stakeholder acceptance, Islamic Finance has become a viable business proposition. Consequently, nearly every component of the current financial markets—including banking, insurance, mutual funds, equity markets, debt markets, and money markets—requires Shariah-compliant variants. The capital market, being a significant and integral part of any financial system, is no exception. Although the Islamic Capital Market is still an emerging segment, it has rapidly evolved through innovative efforts and rigorous deliberation by Shariah scholars and financial experts.

Despite the economic headwinds in 2023, including inflationary pressures, geopolitical tensions, and banking sector stresses, the global Islamic Financial Services Industry (IFSI) managed to grow by 4% year-on-year (YoY), reaching a total of USD 3.38 trillion. Islamic banking remained the largest sector, comprising 70.21% of the global IFSI assets in 2023. Meanwhile, Sukuk outstanding and Islamic funds together represented 29.08%, and the Islamic insurance segment accounted for 0.71%. Regionally, the Gulf Cooperation Council (GCC) held the largest portion of global Islamic finance assets at over 52.50%, followed by East Asia and the Pacific at 21.80%. The Middle East and North Africa (excluding the GCC) accounted for 12.70%, Europe and Central Asia for 8.30%, South Asia for 3.10%, Sub-Saharan Africa for 0.70%, and other regions collectively for 0.90% (IFSB, 2024).

The global IFSI demonstrated a steady YoY growth of 4%, with its assets increasing to USD3.38 trillion in 2023 (2022: USD 3.25 trillion), according to research report. The Islamic Banking assets share in overall pie is 70.21%, in Islamic Bonds (Sukuk) 25.16%, Islamic Funds 2.92% and Islamic insurance (Takaful) 0.71% (IFSB, 2024).

In 2023, Islamic capital markets showed resilience and growth, bolstered by strong fundamentals, innovation, and increasing alignment with global sustainability investment trends. This positive trend is expected to continue as the sector capitalizes on emerging opportunities and navigates challenges, further integrating into the global financial system.

The scripts in stock market affects the crusade demand and supply consequently impacts price determination especially when the status of any script changes from Shariah compliant to Shariah non-compliant. The faith-based Shariah compliant investors immediately sell off the scripts when it becomes Shariah non-compliant, (Dusuki and Abozaid, 2007). This situation shows that Shariah-Compliant status is one of significant determinations of the stock performance. There are number of Stock Screening criteria exists globally to evaluate the status of scripts are Shariah compliant or Shariah non-compliant such as Dow Jones, FTSE, S&P, MSCI, AAOIFI, KMI in Pakistan etc.

To ascertain the Shariah compliance of status of the scripts (company's shares listed on a stock exchange), the scripts have to pass through Shariah stock screening criterion. Shariah screening Stocks Criteria evaluates on the basis of qualitative and quantitative analysis. The stock screening criteria offers investors identifying the status of Shariah compliant scripts at given point in time, so that, the investments do make their decision on the basis of Shariah guidelines.

AAOIFI's Shariah stock screening methodology examines the main business activities of a company and excludes those engaged in interest-based activities, any transactions involving uncertainty, gambling or games of chance, or the manufacturing or trading of impermissible products or services. Regarding the financial ratio screening process, it stipulates that (AAOIFI, 2015) interest-taking deposits and interest-bearing debts must be less than 30% of the stock's market capitalization, and the total market value of illiquid assets must exceed 30% of the total assets' market value. For income purification, the formula is (Internet Income divided by total outstanding shares) multiplied by the number of shares held at year-end (AAOIFI, 2015).

The Shariah Advisory Council (SAC) in Malaysia uses a two-tier quantitative approach to assess the Shariah status of listed securities which is followed by a qualitative approach (Securities Commission Malaysia, n.d.): a) business activity benchmarks and b) financial ratio benchmarks. A five percent threshold is applied to the various sectors for example: conventional Banking and lending, conventional insurance, gambling, alcohol and related activities, pork and related activities, and other activities deemed non-compliant according to Shariah principles as determined by the SAC. A twenty percent threshold applies to the following sectors: Stock Trading, Stock Broking, Cinema, Rental Income from Shariah Non-Compliant Activities and other activities deemed non-compliant according to Shariah principles as determined by the SAC. In addition, there are financial benchmarks: i) Cash to total assets: this includes cash held in conventional accounts and instruments; ii) Debt to total assets: this includes interest-bearing debt. Each percentage must be below thirtythree percent. In addition to the above two-stage quantitative criteria, the SAC also takes into account the qualitative aspect, which concerns the public perception or image of the company's activities from the perspective of Islamic teachings.

In Pakistan, KSE-Meezan Shariah Stock Screening criteria is followed to ascertain whether the script is Shariah Compliance or Shariah non-compliance. The primary objective of Shariah compliant stock index is to provide a rating scale for investors who seek to align their financial objectives in align with religious beliefs. KMI index

also serves as a tool for determining performance of Shariah compliant stocks. The index re-composition is done on semi-annual basis whereby for index construction the free float market capitalization methodology is used with the capped at 12% on weights, as per international practices. Shariah Compliance governance of KMI index is governed by its Shariah Board (Al Meezan Investment, 2024).

However, none of the Shariah stock screening criteria highlights the Shariah Compliance Degree (SCD) of the script. The Shariah Compliance Degree (SCD) is a metric that quantifies the extent to which a stock adheres to Shariah principles, offering a spectrum of compliance rather than a binary classification of "compliant" or "non-compliant." This nuanced evaluation is vital as it provides investors with a deeper understanding of compliance levels, enabling them to make more informed investment decisions.

To illustrate this point, consider two hypothetical companies: Company A, with 6% of revenue derived from non-compliant activities such as alcohol sales, and Company B, with a mere 1% of revenue from such sources. Assuming an existing screening criteria with a threshold for non-compliant revenue set at 10%, both companies may pass such criteria. However, in the absence of SCD, investors are unable to differentiate between the two companies with respect to their adherence to Shariah principles. However, under the SCD framework, Company B could be assigned a higher compliance score, reflecting its closer alignment with Shariah guidelines.

This practical application of SCD highlights its importance in markets where different interpretations of Shariah compliance exist, and provides investors with a tool to better align their portfolios with their ethical and religious values. The introduction of SCD could also promote greater transparency and encourage companies to improve their compliance in order to attract Shariah-conscious investors. Globally, there are numerous Shariah stock screening criteria available for adoption, all of which confirm whether a stock is Shariah compliant or non-compliant. If users need more information, they are referred to the ratios for each set rule of quantitative criteria, which are complex in nature to understand.

The Islamic capital market industry has now reached a substantial level of development, with stakeholders having acquired a solid understanding and knowledge base. However, further clarity is required regarding the extent to which a script listed on the stock market is Shariah-compliant.

The aim of this study is to introduce a simple concept using quantitative methodology to measure the SCD of individual scripts listed on the stock exchange, based on their Shariah Screening criteria results. This approach has the potential to assist users in comprehending, evaluating, and comparing the extent to which a script is Shariah-compliant.

The structure of the paper is as follows: after the introduction, section two presents a literature review, section three explains the methodology adopted in this paper, section four discusses the findings and discussion, section five provides recommendations, and the final section is the conclusion. It is anticipated that this study will introduce an

innovative scoring mechanism for Shariah stock screening results, enhancing existing methodologies by providing a measurable and comparative degree of compliance. This approach is expected to offer a more transparent and practical tool for investors, thereby promoting greater participation and growth in Islamic capital markets.

2. Literature Review

Recent years have seen an increased academic interest in the domain of Islamic finance and investments, with a particular focus on Sharia-compliant stocks. Researchers from a wide range of academic fields have expressed interest in conducting research on Shariah stock screening criteria. The aim of this literature review is to provide a comprehensive overview of the current state of research in this area.

Shariah Compliance status representation through colours: Md. Hashim et al., 2017 published a paper titled "ISRA Bloomberg Shariah Stock Screening and Income Cleansing Methodologies: A Conceptual Paper", which elucidates the Shariah screening criteria and income cleansing process of stock income. The study employs a descriptive approach to explicate the novel ISRA Bloomberg methodology. The methodology employed by ISRA Bloomberg is distinctive in nature, as it utilises a colour-coding scheme to indicate the Shariah compliance of a stock. This enables the observation of changes in the trend of ratios through colour, thereby facilitating the decision in advance of whether a company is likely to remain within the Shariahcompliant list. The paper further discusses the issues in the screening and cleansing practices faced by the industry. Because of its exceptional nature, its methodology can add a new dimension to Shariah-compliant equity investments by providing investors with a well-defined, informed rationale. The study of Md. Hashim et al. (2017) forms the foundation of the present study. They give blue colour representing the mix of income / activities of the script, on the other hand they give red colour to Shariah noncompliant scripts and fully Shariah compliant scripts are highlighted with white colour.

Shariah Compliance status impact on returns: Zandi (2014), studied the stock screening methods used in conventional and Shariah-compliant stock markets, concentrating on the criteria and techniques used to determine compliance with Shariah principles. The study analyses the effectiveness of the different screening methods used in each market in terms of their ability to identify compliant stocks and their impact on stock returns. The study found that the Shariah-Compliant stock markets use a more thorough and rigorous screening process, based on multiple criteria and techniques, compared to the conventional stock markets, which rely mostly on financial ratios.

The study also found that there is no significant difference between the returns of Shariah-compliant and non-compliant stocks in Shariah-compliant stock markets, suggesting that Shariah compliance do not have a negative impact on stock returns. The study concludes that the more rigorous and multi-dimensional screening approach used in the Shariah-compliant stock markets is more effective in identifying compliant stocks and provides a more transparent and efficient method for evaluating the compliance of companies.

Shariah Compliance companies risks and rewards: Ashraf and Khawaja (2016), in their study, sought to address the question of whether the Shariah screening process matters. This study contrasts the performance of market-weighted Shariah-compliant portfolios (SCPs) with conventional benchmark portfolios (CBPs) in Canada, USA, GCC, Japan and Europe. The unique SCP approach used in this study removes concerns about performance deviations that may arise with other portfolio construction methodologies. Empirical results concluded that SCPs are usually less risky than CBPs. The study also highlighted that stocks Shariah screening standards are insignificant in their effect in comparison to return performance. SCPs using the BVTA approach deliver nominal and risk-adjusted returns. The negligible difference in risk-adjusted performance and rebalancing based on different criteria indicates a need for greater consistency in the application of Shariah screening standards. The study also concluded that the screening methodology used has a significant impact on the risk and return characteristics of the resulting portfolios.

Sector wise screening proposal: Derigs and Marzban (2009) propose new strategies and paradigms for Shariah-compliant portfolio optimization, addressing the limitations of conventional methods in creating portfolios that adhere to Islamic principles. Their study highlights the importance of sector-wise screening and financial screening of stocks to ensure compliance with Shariah guidelines. The researchers advocate for applying consistent rule systems in the screening process, which includes adjustments to accommodate varying interpretations of Shariah compliance across jurisdictions. The study concluded that the proposed framework for Shariah-compliant portfolio optimization could yield competitive returns and match the risk profiles of conventional, non-constrained portfolios.

While the study provides valuable insights, it does not thoroughly address the challenges posed by inconsistent Shariah screening criteria across different markets, an issue that has been raised in subsequent literature. For example, Rizaldy and Ahmed (2019) examine Islamic legal methodologies and Shariah screening criteria in the Indonesian stock market and provide a critical analysis of their impact on market performance. They highlight that existing screening standards often suffer from subjectivity and inconsistencies, creating challenges for investors in identifying universally compliant stocks. Their findings underscore the need for global standardisation of Shariah screening criteria to improve market efficiency and investor confidence.

Jabeen and Kausar (2022) analysed the performance of Islamic and conventional stocks in Pakistan's equity market. Their study provides empirical evidence that Shariah-compliant portfolios can deliver returns comparable to or exceeding those of conventional portfolios under certain conditions. The authors argue that the sectoral limitations imposed by Shariah screening, which are often viewed as a constraint, can lead to more focused and risk-averse investment strategies, which may enhance long-term performance stability. However, the authors also note that the lack of uniformity in screening standards complicates cross-market comparisons and investment decisions.

The literature on Shariah-compliant portfolio optimization remains relatively limited, with a need for more critical evaluations of existing screening methodologies. While Derigs and Marzban (2009) established a foundational framework, subsequent studies by Rizaldy and Ahmed (2019) and Jabeen and Kausar (2022) emphasised the necessity for refinement and standardisation of Shariah screening criteria. These enhancements are imperative to address market inconsistencies, ensure that Shariah-compliant portfolios not only meet religious requirements, but also offer competitive returns and align with investor risk preferences.

2.1. Shariah Stock Screening Criteria of KMI Index

The Shariah Stock Screening Criteria of KMI consists of six key tests which are as follows (The Karachi Stock Exchange Limited and Al Meezan Investment Management Ltd, n.d.):

1. Core-Business of the Investee Company

The company's core business must be Halal and in compliance with Shariah principles. Therefore, companies engaged in conventional banking, arms manufacturing, pornography, conventional insurance, alcoholic beverages, pork production, or other impermissible activities are not allowed.

2. Interest Bearing Debt to Total Assets

The Debt to Asset ratio must be below 37%. In this context, debt refers to any interest-bearing liabilities. Zero coupon bonds and preference shares are considered part of debt by definition.

3. Non-compliant Investments to Total Assets

Non-compliant investments should make up less than 33% of total assets. This includes investments in any non-compliant securities such as interest-bearing bank savings accounts, TDRs, corporate bonds, T-bills, PIBs, TFS, NSS, DSC, derivatives, zero coupon bons, preferences shares and similar financial instruments.

4. Shariah Non Complaint Income to Total revenue

Non-Compliant Income to total revenue must be less than 5%. However, total revenue includes Gross revenue and other income of the company.

5. Illiquid Assets to Total Assets

Illiquid Assets must constitute at least 25% of Total Assets. Illiquid assets refer to assets other than cash or cash equivalents, such as inventory and fixed assets, while excluding long-term investments in interest-based institutions.

6. Net Liquid Assets/Share vs. Market Price/Share

The market price per share should be greater than the net liquid assets per share calculated as: (Total Assets – Illiquid Assets – Total Liabilities) divided by number of shares.

A company is considered Shariah-compliant if it meets all six of the above criteria, even if there is a certain level of Shariah non-compliance in its financials. To illustrate this point, consider a company with an interest-based debt to total assets ratio of 27%,

which, according to the established criteria, would be deemed Shariah-compliant as it falls below the 37% threshold. Similarly, if the ratio of non-compliant revenues to gross revenues is 4%, it is still considered Shariah compliant as it is below the 5% threshold.

3. Research Methodology

3.1. Methodology

The descriptive research methodology is employed in this study, as proposed by Grimes and Schulz (2002). Utilising this observational approach facilitated the formulation of a scoring model and the identification of new areas for further research and value addition by conducting a quantitative analysis of the existing Shariah Stock Screening criteria. Descriptive research can be defined as a research methodology employed to describe existing occurrences with the greatest precision. The term 'existing occurrences', i.e. 'existing phenomena', is used to describe descriptive research, which is the opposite of experimental research. The phenomena observed in descriptive research are already available, and researchers are involved in collecting available data through the use of research instruments such as questionnaires, interviews, tests or even observations. The main goal of descriptive research is to describe systematically the existing phenomena under study (Atmowardoyo, 2018).

3.2. Proposed Mechanism for Simplification and Ascertaining Shariah Compliance Degree

In this study, a simplified methodology is proposed to determine the degree of Shariah compliance based on quantitative ratio results of Shariah stock screening recomposition of KMI Index on semi-annual basis. By applying the proposed model, a single percentage is obtained from the results of five screening criteria for each script.

Figure 1: Proposed mechanism

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\int (x_1) \left(\frac{1-(W_1 \times W_2 \times W_3)}{\Sigma W_1 W_2 W_3} < 50\%\right), \left(\frac{(W_1 \times W_2 \times W_3)}{\Sigma W_1 W_2 W_3} > 0\%\right)
\int (x_2) = (W_4 = Y_1 = 0), (W_4 = Y_2 = 1)
\int (x_3) = (W_5 = Z_1 = 0), (W_5 = Z_2 = 1)
W_1 = \text{Debt to Assets Ratio}
W_2 = \text{Non Compliant Investments to Total Assets Ratio}
W_3 = \text{Non Compliant Income to Total Income Ratio}
W_4 = Y_1 = \text{Illiquid Assets to Total Assets Ratio} < 25\%
W_4 = Y_2 = \text{Illiquid Assets to Total Assets Ratio} > 25\%
W_5 = Z_1 = \text{NLA per share (NLA pe share < Share Price)}
W_5 = Z_2 = \text{NLA per share (NLA pe share > Share Price)}
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I. Since first three ratios are pertaining to Interest based payments or receipts (mix income / activities), weight ages are calculated in correlation with each other, the results of each ratio is divided by sum percentage of three ratios.

- II. If ILA to TA is less than 25%, weightage will be '1' and if above than 25% then weight age will be '0'.
- III. If NLA is less than SP weight age will equal to '0' otherwise weight age will be '1'.

3.3. Data Collection

Data collection is the process of collecting and measuring information on variables of interest in an established systematic manner. For the purpose of this research, data was also collected from the KSE Meezan 30 Index (KMI-30) for the review period from 1 July 2023 to 31 December 2023.

4. Findings and Discussion

The most of the scripts (companies) available to investors do have mix of activities. (Md. Hashim et al., 2017), there can be many reasons for that such as;

- Companies do not have enough investment opportunities to invest their surplus funds into Islamic instruments.
- Companies do not get full funding on Shariah compliant products from Islamic Banks hence have to have some advances portfolio from conventional institutions.
- Companies maintain limited tangible / illiquid assets to support their operations.

For this reason, Shariah stock screening criteria have been developed to assess companies based on certain thresholds. For example, company A may be listed as a Shariah-compliant company with X% of its income from Shariah-noncompliant activities. However, companies with business activities that do not reach this threshold may still be considered Shariah-compliant (Md. Hashim et al., 2017).

The list of companies does have mix of Halal and Haram elements but still are considered Shariah compliant because it qualifies all thresholds set by KMI Index Shariah stock screening criteria, the details of which is affixed in Annexure '01'.

The stakeholders have to look into the details of each ratio among five quantitative analysis of KMI Index as referred in Annexure '01' to understand the problem, which is most complicated for general users. Moreover, complication further increases when there is a need to analyse them with previous re-composition results for critical problem investigation purpose.

4.1. Application

In current practice, the KMI Shariah Stock Screening results announced Shariah compliance status as either stock is 'Shariah Compliant' or 'Shariah Non-compliant'. For investors interested to know more in detained are referred to go through Shariah Stock Screening results against each financial criterion. Example of one script POL is mentioned below for clarity:

"POL is Shariah Compliant"

The Shariah Stock Screening result of POL is as follows shown in Table 1 (below):

Table 1: Shariah Stock Screening results of POL

POL		%
Debt to Assets Ratio <37%		0.00%
Non-Compliant Investments to Total Assets <33%		0.60%
Non-Compliant Income to Total Income <5%		3.42%
Illiquid Assets to Total Assets >25%		36.35%
Net Liquid Assets per Share < Share Price (SP)	NLA	25.04
	SP	357.62
POL is Shariah Compliant		Compliant

Understanding the Shariah Stock Screening results is not straightforward for investors or other key stakeholders, making it difficult to make informed decisions. Additionally, there is no tracking of historical results to compare with previous outcomes, making it challenging to determine whether there has been an improvement or deterioration in the company's Shariah Compliance.

However, with our proposed methodology, investors or other key stakeholders will receive a single, straightforward figure that is easier to understand and compare with previous financial results.

After applying our proposed methodology on screening results of POL, the outcome will look as follows:

"POL is 95% Shariah Compliant"

For more details, Shariah Stock Screening results of POL will be referred as follows (Table 2):

Table 2: Application of proposed Weightages

POL		Dec 23	Weight	Results
Debt to Assets Ratio <37%		0.00%	1.333	0.000
Non-Compliant Investments to Total Assets <33%		0.60%	1.325	0.008
Non-Compliant Income to Total Income <5%		3.42%	1.288	0.044
Illiquid Assets to Total Assets >25%		36.35%	0	0.000
NLA per Share (NLA per share < SP)	NLA	25.04	0	0.000
	SP	357.62	3.946	0.052
Company Shariah Non-Compliant Status with 5.2%				0.052
Company Status is Compliant with 95%				0.950
				Compliant

By applying the proposed methodology to KMI 30 Index listed scripts, the SCD of each company will provide a clear status to monitor the company's progress towards Shariah compliance during each recomposition period. If this methodology is used for

all Shariah-compliant companies listed on PSX, both the company and investors can easily gauge the level of commitment to Shariah compliance. Upon applying the proposed methodology, the results will be reported to stakeholders will be as follows (Table 3):

Table 3: KMI - 30 Proposed List of Shariah Compliant Stocks

Table 3: KMI – 30 Proposed List of Shariah Compliant Stocks					
No.	SYMB	COMPANY NAME	% COMPLIANT	STATUS	
1	MEBL	Meezan Bank Limited	100%	Compliant	
2	FABL	Faysal Bank Limited	100%	Compliant	
3	DCR	Dolmen City REIT	100%	Compliant	
4	MARI	Mari Petroleum Co Limied	94%	Compliant	
5	SHEL	Shell Pakistan Limited	91%	Compliant	
6	SEARL	The Searl Company Limited	91%	Compliant	
7	NETSOL	Netsol Technologies Limited	90%	Compliant	
8	PPL	Pakistan Petroleem Limited	85%	Compliant	
9	CHCC	Cherat Cement Limited	84%	Compliant	
10	SYS	Systems Limited	84%	Compliant	
11	PIOC	Pioneer Cement Limited	84%	Compliant	
12	ATRL	Attock Refinery Limited	81%	Compliant	
13	MTL	Millat Tractor Limited	81%	Compliant	
14	EPCL	Egro Polymer and Chemicals Limited	79%	Compliant	
15	EFERT	Engro Fertilizer Limited	79%	Compliant	
16	MLCF	Maple Leaf Cement Factory	79%	Compliant	
17	NRL	National Refinery Limited	78%	Compliant	
18	FCCL	Fauji Cement Company Limited	71%	Compliant	
19	SNGP	Sui Northern Gas Pipelines Limited	71%	Compliant	
20	LUCK	Lucky Cement Limited	70%	Compliant	
21	ILP	Interloop Limited	70%	Compliant	
22	TPLP	TPL Properties Limited	69%	Compliant	
23	PSO	Pakistan State Oil Co Limited	68%	Compliant	
24	PRL	Pakistan Refinery Limited	63%	Compliant	
25	UNITY	Unity Foods Limited	61%	Compliant	
26	AIRLINK	Air Link Communication Limited	60%	Compliant	
27	DGKC	DG Khan Cement Limited	58%	Compliant	
28	NML	Nishat Mills Limited	53%	Compliant	
29	ENGRO	Engro Coorperation Limited	46%	Compliant	
30	HUBC	Hub Power Company Limited	37%	Compliant	

Note: The scripts given exception by KMI Index Shariah authority during recomposition, in this study given a qualifying threshold percentage to comply with the requirements.

4.2. Enhancement over single percentage

Furthermore, in order to enhance the above Shariah compliant degree, it can additionally be represented into badges or stars rating system e.g. the star rating grid may be adopted as shown in Table 4:

Table 4: Enhancement

Ratings		Percentage Range
Five Star Rating	* * * * *	100%
Four Star Rating	$\Rightarrow \Rightarrow \Rightarrow \Rightarrow$	75% - 99%
Three Star Rating	* * *	50% - 74%
Two Star Rating	*	25% - 49%
One Star Rating	*	1% - 24%

5. Recommendations

To improve the understanding and practical use of Shariah stock screening results, several recommendations can be made. First, it is essential to simplify the process for investors by creating user-friendly tools that provide a clear overview of each company's level of compliance. For example, compliance percentages and financial ratios could be presented in easy-to-read formats such as charts, graphs or badges, making it easier for all stakeholders to interpret the information.

Improving the reporting framework is another important step. A star rating system can be introduced to rate companies according to their level of compliance. This would provide an intuitive snapshot to help investors quickly assess a company's Shariah compliance. Historical data should also be made available so that investors can track changes in compliance over time, which can inform their decision-making and highlight a company's efforts to improve its adherence to Shariah principles.

Educational initiatives are also important. Programmes such as workshops, webinars or seminars can help investors and companies better understand the criteria used in Shariah screening and the financial and ethical implications of compliance. In addition, companies should be encouraged to seek expert advice on how to improve their operations in line with Shariah requirements.

Regular updates to the screening methodology are recommended to ensure it remains relevant in a changing market. This includes assigning weightings to companies that demonstrate proactive efforts to comply with Shariah principles. These refinements can make the methodology more dynamic and encourage higher standards of compliance.

Transparency should be a key priority. The publication of detailed compliance reports for all companies included in the KMI-30 Index would enhance investor confidence. Companies with lower compliance scores should also communicate their plans for improvement, demonstrating their commitment to Shariah principles.

Finally, the industry as a whole should consider adopting the proposed methodology to standardise how compliance is measured and monitored. Collaboration with other markets could help create a more consistent approach, ensuring consistent and fair assessments across the board. The use of technology, such as artificial intelligence, can

further streamline the process by providing real-time insights into compliance status and potential risks.

These recommendations aim to make the Shariah compliance process clearer, more transparent, and easier to engage with, benefiting both companies and investors in the Islamic financial market.

6. Conclusion

The current mechanism for Shariah stock screening criteria of the KMI Index is highly technical and complicated for general users. It is challenging for any investor or stakeholder to delve into the details and identify specific issues within the script. The proposed methodology aims to solve this problem by providing value-added benefits that will help investors and stakeholders to understand the process more easily (Chen, 2017). In addition, it will be equally beneficial for company management to determine Shariah compliance values and identify areas of concern by examining individual ratios as needed. This will be an important step towards improving the overall Shariah compliance environment within the ecosystem. It will also have a positive impact on society by increasing confidence among brokers, investors, regulators and other stakeholders. The proposed methodology is practical and easy to apply to assess the SCD level of each script, which is essential for many stakeholders. It is recommended that the respected Shariah Advisory authority of the KMI Index and the management of PSX consider its adaptation. Furthermore, other Shariah stock screening methodologies should also consider simplification and introducing SCD of scripts using weightage methodologies. It is anticipated that this research could have significant implications for developing standardised methodologies across global Islamic stock markets, fostering greater consistency and trust within the industry.

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