Sharī'ah Screening Process of Capital Markets: An Evaluation of Methodologies

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ABSTRACT. This study highlights the issues in the screening process of Sharī'ah-compliant stock universe from Sharī'ah and professional perspectives. We have critically analyzed Sharī'ah-compliance methodologies of selected (eight) institutions in the light of Islamic principles of business. The findings suggest multiple weaknesses in the process, including variations in tolerance limits (for *ḥarām*-elements), variations in the use of calculation methods (total assets and market capitalization), insufficient income purification mechanism, and confusions about the application of *bay' al-ṣarf* and *bay' al-dayn* regulations. In addition, we find lack of revisions in the tolerance limits, corresponding to the expansion of the Islamic finance market. We also find that certain important areas, such as questionable marketing and sales practices and environmental damages, are ignored in filtration. This study proposes a Sharī'ah-compliance rankings mechanism for Islamic stock markets, within agreed upon framework, based on the degree of violations.

Keywords: Islamic capital market, Sharī'ah Screening, Islamic finance, Islamic Indices, Islamic Business, Islamic stock Portfolio, Income purification.

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1. Introduction

Although, the capitalistic economic system dominates global economic affairs with all of its features including utilitarianism, liberalism, and individualism, yet certain segments of the global society think and act beyond self-interest. Motivations and inspirations of these segments vary from humanitarianism, environmental protection to religiosity. These groups do influence economic behavior, including socially responsible consumption and investment – doing well by doing good – however, with varied definitions/understanding of social responsibility. Globally, waves of Socially Responsible Investments (SRI) are at a rise, as depicted by the volume of assets – close to US\$23 trillion, by 2016 (Global Sustainable Investment Alliance [GSIA], 2016, p. 3). Followers of Islamic teachings aspire for controlled/socially responsible economic behavior in the light of the Shari'ah. However, modern business forms and institutional structures have developed, primarily, under Shari'ah non-compliant regimes. Although there are 57 Muslim states in the OIC and the declared religion of the majority in these societies is Islam, yet adherence to Islamic economic teachings is very low. According to Rehman and Askari (2010, p. 17), Economic Islamicity (measured in the areas of economic justice, employment, and adoption of Islamic economic practices) of Muslim-majority societies is very low on global ranking, and the top 32 countries are, predominantly, from non-Muslim-majority societies. In such a situation, adherence to the Islamic code in public life – which is the foundation for institution building – is difficult.

One of the widely spread and well-appreciated institutions in the modern business system is the corporate form of business. Whether such a form of business is in line with Shari'ah guidance is a question well debated in modern Islamic finance literature. According to the Accounting and Auditing Organization for Islamic Financial Institutions' Shari'ah-Standards numbered 12, 17, 20, and 21, forming a company, and/or investing/trading in stocks of an existing company is permissible with certain restrictions, from a Shari'ah point of view (AAOIFI, 2015). The first part of the restrictions relate to participation in capital markets in general – and include impermissibility of dealing in preference shares, *tamattu'* shares, purchase of shares through

interest-based loans, margin sale, short selling, lending of shares, application of *salam* contract in buying stocks, conventional futures, options, swaps, and renting of shares. The second part of the restrictions are related to the investment (short and long-term) in equities of an existing company – Shari'ah-compliance status of the underlying corporation. To achieve the objective, a set of Shari'ah screens have been designed by Shari'ah boards of various institutions engaged in the preparation of Shari'ah-compliant universe of stocks readily available for Islamic investors. Areas covered in these screens include core activity of the underlying company and tolerance limits for liquidity, *haram* investments, interest-based debts, and *haram* income. However, all these screens are negative (what not to be done) and lack positive filtration (what ought to be done).

Whether after meeting these criteria, a company becomes Shari'ah-compliant or further filtration is required, is a question of debate among experts. Additionally, there is a lack of uniformity in Shari'ah-compliance criterion of various agencies, resulting in different results on account of the Shari'ah-compliant universe of stocks, as documented by Derigs and Marzban (2008, p. 296), Abdul Rahman, Yahya, and Nasir (2010, p. 235), Sani and Othman, (2013, p. 11).

Derigs and Marzban (2008) concluded after applying Shari'ah screening methodologies of nine different institutions (indices & equity funds) to the S&P 500 index that the asset universes are significantly different in size as well as constituents. This is an evidence of lack of universal understanding about the transformation of descriptive Shari'ah rules into a robust quantitative system. Abdul Rahman et al. (2010) conducted a study on the Malaysian Islamic capital market and found significant differences in the number of companies that qualified as Shari'ah compliant under the methodologies of the Dow Jones Islamic Market and the Malaysian Islamic Market. Sani and Othman (2013) found significant differences in the number of Shari'ah compliant companies under the methodologies of the MSCI Islamic index and the Malaysian Islamic Market.

Questions have also been raised in the literature on Shari'ah-compliance filters as well as tolerance limits suggested by Shari'ah-boards (Mansoori &

Khan, 2015, pp. 54-55; Khatkhatay & Nisar, 2007, p. 68; Obaidullah, 2009, p. 192).

What needs to be screened for checking Shari'ah-compliance status of a business? The answer lies in understanding the guidelines and principles of doing business as per Islamic law. This study offers a very brief review of such guidelines, critically analyses the existing screening methodologies (in the light of Shari'ah-norms and professional-practices), develops a Shari'ah-compliance ranking mechanism (for Shari'ah-compliant universe of stocks based on agreed upon filters), and documents future direction towards unfinished agenda on the development of Islamic Capital Market-ICM. This study is timely as about a decade has passed since the introduction of the Islamic capital market and numerous Islamic indices have been developed with differences in Shari'ah-compliance filters – leading to confusion among Islamic investors and discouraging international portfolio diversification (Htay, Abedeen, & Salman, 2013, p. 30; Zaidi, Shah, Ashraf, Ghauri, & Hassan, 2015, p. 251; Ho, Abdul Rahman, Yusuf, & Zamzamir, 2011, p. 108). This is the right time to present a comprehensive critical analysis and document important findings to be used for further developments in the future by various stakeholders including policy-making institutions, Shari'ah boards, standard-setting bodies, and investors.

This study contributes to the literature in the area of socially responsible investments based on Islamic principles, covering filtration of companies for Islamic investors from Shari'ah as well as practical considerations. Socially responsible investing, as well as, participation in the business process in line with religious beliefs, is a growing body of knowledge with a healthy growth in assets and participants (Dar & Azmi, 2017, p. 36). The Islamic financial system contributes to financial stability through linking the real and monetary sectors, hence, getting increased attention in post-financial-crisis era.

The rest of the study proceeds in the following order. In section two, a brief review of Islamic principles of business is presented, followed by a critical evaluation of existing screening criterion in section three. Section four presents a mechanism for Shari'ah-compliance rankings of firms followed by summary and conclusion in section five.

2. Principles of Islamic Business

From Shari'ah considerations, a business is said to be Shari'ah-compliant if it gives adherence to Shari'ah-principles. A very brief review of Shari'ah-principles of business is presented here.

- The first principle is that the activities of the underlying business must be *halāl* (permitted). Qaradawi, (1960, p.6) has documented “nothing is *harām* except what is prohibited by a sound and explicit *naṣṣ* (al-Qur’ān and Sunnah) from the Law-Giver, Allah (Glory be to Him)”. The Islamic principle in *halāl* and *harām* is that the list of *harām* is provided and everything else is *halāl*. However, in modern institutional settings, *halāl/harām* of any business and/or transaction has to be decided on the basis of certain fundamental principles of the Islamic law of contracts. Certain activities are clearly stated as *harām* including the business of alcoholic beverages, pork-related products, pornography, casinos, etc. (al-Qur’ān, 2:172-173; 5:3; 5:90-91; 6:145; 24:19; 24:21). A business engaged in these prohibited activities is Shari'ah non-compliant.
- The second principle relates to *ribā*-based (interest/usury) operations. Dealing in interest is not allowed in Islam (al-Qur’ān, 30:39; 4:161; 3:130; 2:275-281). Conventional financial services including banking and insurance are examples of dealing in *ribā*. If a business is otherwise *halāl*, however, its investments earn interest and/or financing is debt-based (interest related) then such a business is not classified as Shari'ah-compliant.
- The third principle is relating to excessive *gharar* (uncertainty regarding subject matter and price) or higher degree of risks in operations of such a business. Excessive *gharar* is not allowed. Mansoori (2007, p. 179) documents that *gharar* contains (certain) characteristics such as risk, hazard, speculation, uncertain outcome, and unknown future benefits (whether the transaction will be complemented in terms of its eventualities). Conventional insurance, where risk is traded, is an example of *gharar*-based business.

- The fourth principle is avoidance of *maysir* and *qimār* (speculation or any game of chance). According to Ayub (2007, pp. 61-62), *maysir* refers to easily available wealth or acquisition of wealth by chance, whether or not it deprives the other's right. *Qimār* (similar to *maysir*) means any game of chance where one gains at the cost of others. *Maysir* is prohibited by the Holy Qur'ān (2:219; 5:90).
- Another principle is that a Sharī'ah-compliant business is required to follow the Islamic principles of trade, including the five *khiyārs* (options). According to Usmani, (2002, p. 77) the five *khiyārs* include; *khiyār al-sharṭ* (option to rescind contract within specific period); *khiyār al-ru'yah* (option to inspect); *khiyār al-'ayb* (option to return defective goods); *khiyār al-waṣf* (option to return the good if product does not match description); *khiyār al-ghabn* (option to cancel contract when charged higher price by deceit).
- Another important principle of Sharī'ah relates to *bay' al-ṣarf* (trade of gold, silver, and currencies) and *bay' al-dayn* (trade of debts). As per Sharī'ah norms, these liquid assets cannot be traded, except at spot price/par value (An example of violation from modern businesses is Factoring – selling accounts receivables at discount).
- Honoring contracts and keeping the sanctity of promises is clearly stated in Sharī'ah law. Allah (Glory be to Him) has counted trustworthiness and contract-honoring as characteristics of believers, in addition to other qualities. Allah says in the Holy Qur'ān, "Those who [Believers] are faithfully true to their *amānāt* (all the duties which Allah has ordained, honesty, moral responsibility and trust) and to their covenants" (23:8). According to a famous *ḥadīth*, one of the characteristics of a hypocrite is "whenever he makes a covenant, he proves treacherous" (al-Bukhari, 1997, 1:71-72, *ḥadīth* no. 34). Hence, for a business to be declared Sharī'ah-compliant, it is of immense importance that it is honoring promises and contracts. An example from the modern-day corporate sector is honoring warranties issued on products sold.
- Sharī'ah-compliance in entirety is required in operations of business including safety measures, transparency, *ḥalāl* ways in marketing and sales, just and timely payment of wages to the workforce, careful attention to cleanliness, etc.
- Another principle relates to the environmental friendliness of a Sharī'ah-compliant business. A business that is creating industrial pollution and wastes which are dangerous for health and life of humanity and other creatures cannot be considered Sharī'ah-compliant unless it contributes to the restoration of environmental damages. Saged, Alhaj, and Bi (2017, p. 131) document that caring for and preserving the environment is among the purposes of Islamic law on account of the welfare of mankind. Obaidullah, (2005, p.35) documents the importance of environmental safety, from Islamic-ethics perspective, after surveying about 200 experts (including researchers, economists, bankers, finance professionals, Sharī'ah scholars, etc.).
- Finally, payment of *zakāh* is required from a Sharī'ah compliant business, as per laid down rules of *zakāh*.

Whether adhering, in entirety, to these principles in practice is possible or not given the prevailing business-structure and institutional-setting, dominated by Sharī'ah non-compliant regulations, coupled with low Islamicity even in Muslim majority countries (Rehman & Askari, 2010, p. 17), has remained an important and interesting question since the initial waves of the modern Islamic financial system. Taking into account the multiple factors that contribute to the difficulty of following the Sharī'ah in doing business globally, certain concessions have been granted by experts. In the following section, a critical review of the concessions/restrictions is presented.

3. Sharī'ah Compliance Filters

Over the period, in the development process of the modern Islamic financial system, certain efforts have been made to determine Sharī'ah-compliance status of companies listed on the securities market. In this section, a comparative critical study of Sharī'ah screening filters has been conducted on a purposefully selected sample of institutions. Our sample includes

five globally recognized indexes, with larger geographic coverage, including the Dow Jones Islamic Market Indices (DJIMI), S & P Shari'ah-Indices (S&PSI), MSCI-Islamic Index Series (MSCI-IIS), FTSE-Shari'ah Global Equity Index Series (FTSE-SGEIS), and International Shari'ah Research Academy-Bloomberg (ISRA-B). In addition, the sample also includes three academic powerhouses in the area of Islamic finance: AAOIFI, KSE-Meezan Index (KMI)-Pakistan, and Securities Commission Malaysia (SCM).

For a company to be Shari'ah-compliant, it is not required that all members/shareholders must be Muslims. According to AAOIFI, (2015, p.327), partnership in business is allowed with non-Muslims; and a modern corporation is a special form of partnership. In addition, there is no geographic restriction on the establishment of a company to be a Shari'ah-compliant business. Investment is allowed irrespective of the fact whether a company is formed and headquartered in a Muslim majority country or otherwise. In addition, there is no restriction whether such a company is formed under British common law or any other law, to the best of the author's knowledge. This is inferred based on prevailing practices of ICM, as company formation law is not included in the filtration process and companies formed in different jurisdictions including non-Muslim countries are included in Shari'ah compliant universes. However, this is an important aspect which needs attention of Shari'ah scholars and experts.

Institutions engaged in Shari'ah-compliance process of stock markets have agreed on two-tier filtration of constituents. First and foremost is checking Shari'ah-compliance of the core/principal activity of the underlying firm. Once a company is successful on business screening, then financial screens including the level of liquid assets, level of interest-based debts, level of interest-based investments, and tolerance limit for *haram* income are applied. By matching these Shari'ah-compliance screens with the principles stated above, we find them incomplete; because measuring tools for honoring contracts, marketing and human resources policies, environmental damages, *zakāh* payment and applications of Shari'ah trading rules are missing. One constraint being faced practically, is that the ownership of companies belongs to both Muslims and Non-Muslims and

certain expectations of Shari'ah compliance (specific to Muslims, e.g., payment of *zakāh*), in entirety, from such companies might be too optimistic. In the following paragraphs, a brief critical analysis of Shari'ah compliance filters, developed so far, is presented.

3.1 Business Activity

Regarding the business activity of a company, there are very clear restrictions in the Shari'ah. From Shari'ah considerations, companies are classified, objectively, in three categories as follows:

- The first category includes corporations with business activities approved (*halāl*) by the Shari'ah (e.g., companies engaged in the provision of lawful needs and wants of consumers including food, garments, furniture, education, and healthcare services, etc.).
- The second category includes corporations engaged in operations disapproved (*haram*) by the Shari'ah (e.g., companies engaged in the production of liquor, pork, pornography, casinos, etc.).
- The third category includes companies partially engaged in permitted activities and partially in prohibited activities (e.g., a cement manufacturer keeps cash in interest-based bank accounts and earns interest income).

There is a difference of opinion regarding the Shari'ah-compliance status of these companies (third category). One group of experts does not consider these companies appropriate for *halāl* investments (Islamic Fiqh Council, 1995⁽²⁾; al-Munajjid, 2013; al-Osaimi, 2005). However, another group advocates investment in these companies, if the contribution of the *haram* segment is within a tolerable limit (AAOIFI, 2015, p. 563). Variations exist in screening processes based on business activities of sample institutions (certain business-sectors are excluded entirely by some, while kept by others). However, none have included any business sector which is

(2) The Islamic Fiqh Council (IFC), Muslim World League (MWL), during its 14th session held in Makkah Mukarramah on 20 Sha'ban 1415H (21 January, 1995) decided the following . . . Third: It is unlawful for a Muslim to buy shares of companies and banks if some of their dealings are involved in usury and the buyer knows it.

engaged in *ḥarām* activities as core business (e.g., conventional financial services sector).

Once a business is cleared on business activity screening, then financial screening is applied.

3.2 Asset Structure

As per Islamic law, trading rules are different for absolute liquid items including gold, silver, and currencies, as well as debts from general trading rules for commodities and assets. Cash and accounts receivables (assets) cannot be traded at a premium or

Financial screening addresses four elements: tolerance limits for *ḥarām* investments, interest-based debts, liquidity, and *ḥarām* income.

discount (AAOIFI, 2015, p. 567). Keeping these rules in consideration, a limit has been imposed by Sharī'ah boards of various Sharī'ah-screening agencies, engaged in the preparation of Sharī'ah-compliant universe of companies (Table 1).

Table (1) Financial Screening

Institution	Liquidity Limit	<i>Ḥarām</i> Investments	Interest-Based Debts	<i>Ḥarām</i> Income
Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI, 2015-Sharī'ah St. # 21)	70% *	30% **	30% **	5% ***
FTSE Sharī'ah Global Equity Index Series [FTSE-SGEIS] (FTSE, 2017)	↓83% *	33.33% *	33.33% *	5% ***
Dow Jones Islamic Market Indices [DJIMI] (S&P Dow Jones Indices, 2017b)	↓66% **	33% **	33% **	5% ***
S&P Sharī'ah Indices [S&PSI] (S&P Dow Jones Indices, 2017a)	↓82% **	33% **	33% **	5% ***
MSCI Islamic Index Series [MSCI-IIS] (MSCI, 2011)	↓66% *	33.33% *	33.33% *	5% ***
Intl. Sharī'ah Res. Academy-Bloomberg [ISRA-B] (Hashim, Habib, Isaacs, & Gadhoom, 2017)	Silent	33% **	33% **	5% ***
Securities Commission Malaysia [SCM] (Zainudin, Miskam, & Sulaiman, 2014)	Silent	33% *	33% *	5% *** ‡ 20%
KSE-Meezan Index [KMI] (al-Meezan Investment Management Ltd., 2017)	75% *	33% *	37% *	5% ***
* Total Assets; ** Market Capitalization; *** Total Revenue; ‡ 20% for doubtful activities ↓ Limit for accounts receivables is < 50%, 33%, 49% & 33% for FTSE, DJIM, S&PSI and MSCI, respectively, while limit for cash and interest bearing items is < 33% for all, which effectively, raises liquidity limit to 83%, 66%, 82% and 66%, respectively – assuming interest bearing items, other than cash, are zero.				

Source: Table constructed by author – sources of data mentioned in the table are updated in references

A review of the table suggests the following important findings. Limit on liquid assets varies from 66% [DJIMI, MSCI-IIS] to 83% [FTSE-SGEIS]. As per the Sharī'ah Global Index Equity Index Series (updated 2017), the accounts R/A limit is up to 49%, while the cash and interest-based investment limit is up to 33%. All these are monetary/liquid assets, because

interest-based investments are a special form of receivables, hence, effectively the liquidity limit reaches to 82%. Likewise, in the case of the Dow Jones Islamic Market Indexes (updated 2017), the limit of accounts receivables is up to 33%, while the limit of cash plus investment in interest-based securities is up to 33% – which leads to a liquidity

limit of up to 66%. MSCI Islamic Index series (updated 2011), states that the tolerance limit for accounts receivable plus cash is 33% and the tolerance limit for cash plus interest bearing securities is 33%. Assuming cash is zero, then the tolerance limit of liquid assets, effectively, reaches to 66%. The apex standard-setting body (AAOIFI) has set a limit of liquid assets up to 70%. In addition, SCM and ISRA-B do not consider any cap on liquid assets appropriate in checking Sharī'ah-compliance status of a company. KMI has given an additional screen that the market price to book value of net liquid assets should be >1 .

Hence, a polarization has emerged in this area of screening. Sharī'ah rulings are clear for the trading of currencies (*bay' al-ṣarf*) and trading of debts (*bay' al-dayn*). While shares of a company are being traded at a stock market, price fluctuations do occur; and if a company is carrying a very high ratio of liquid assets, then trading of its shares would be similar to the trade of either cash or debts or both – which cannot be traded except at par or face value (spot price). Keeping in view this important Sharī'ah ruling, this huge polarization in the liquidity aspect of screening is not justified.

If the liquidity limit is imposed on the basis of rules of *bay' al-ṣarf* and *bay' al-dayn*, then it should not be more than 33.33%. There is an established *fiqh* rule about a commodity that is part gold and part brass; it qualifies as gold if the percentage of gold is greater than 33.33% for the purposes of applying the rules of *ribā* (Obaidullah, 2009, p. 77). However, there is another established principle of *fiqh*, as cited by AAOIFI (2015, pp. 576-577), that the secondary is subservient and the secondary thing will take the rule of the primary and will not be assigned a separate rule. Hence, trading in stocks of a company is permissible without taking into account the rules of *bay' al-ṣarf* and *bay' al-dayn*, if its purpose and activity are to trade in tangible assets, benefits, and rights with the condition that the market value of illiquid assets (real assets) is not less than $1/3^{\text{rd}}$ of total assets. In case liquid assets exceed from $2/3^{\text{rd}}$ of total assets, then they are not secondary and the rules of *bay' al-ṣarf* and *bay' al-dayn* shall come into practice. However, in case of *ṣirāfah* companies, i.e. companies primarily engaged in dealing in gold, silver and/or currencies, the rules of *bay' al-ṣarf* shall be applied. This opinion looks more appropriate in

case of manufacturing and trading businesses with real assets, as going concerns.

There is another important implication of tolerance limit in the area of liquidity for the services sector. In modern economies, services occupy a prime place in the Gross Domestic Product (GDP). There are some very big companies (e.g., Apple, Microsoft, Google, FaceBook, etc.) engaged in nontraditional businesses (of course, the business screen is applicable in all business-sectors, and these modern corporations have no exception). Nevertheless, what would be the liquidity limit, for a modern service-based organization, engaged in the provision of a *ḥalāl* service in the area of education, healthcare, Information and Communication Technology (ICT), accounting and finance, consultancy services, legal firms, tourism and events management firms, etc.? By design, their illiquid assets are very low. However, based on their ability to deliver services and market reputation, they earn a huge amount of revenue which is priced on the stock market – leading to very high market capitalization. Investors do not purchase their stocks, based on asset structure; rather expected revenue is the reason for equity investments in such companies. Likewise, what about investing in stocks of Islamic financial institutions, especially, Islamic banks where *murābahah* (sale of assets on deferred-payment basis, resulting in the generation of accounts receivables) is dominating with cash balances or receivables from other banks? Real or illiquid assets of an Islamic bank do not dominate the assets' structure, by design of the nature of activities. In service organizations, the ability to deliver services, leadership in creation and use of technology, customers' relationship, professional and scientific knowledge as well as the expertise of human resources, coupled with market reputation, generate revenue leading to a strong case for non-traditional treatment. Sharī'ah experts need to look into this reality of the services sector and consider an exemption from the rules of *bay' al-ṣarf* and *bay' al-dayn*, or at least establish a separate tolerance limit of liquidity for the services sector. Mansoori and Khan, (2015, p. 66) document that quantum of liquid assets in total assets of a going concern, having some real assets, should be ignored and the rules of *ribā al-faḍl* should not be applied strictly in stock trading.

Another issue – not specific to the liquidity ratio only, but covering interest-based debts and *ḥarām* income too – is the use of market capitalization as bases for calculation. Some institutions use total assets as a base (AAOIFI, FTSE-SGEIS, MSCI-IIS, and KMI) while others use market capitalization (S&P-SI, and DJIMI). Total assets are not a proxy of market capitalization and vice versa. As per the prevailing double entry accounting system, the balance sheet of a company depicts its assets which are equal to its liabilities plus owners' equity. Market capitalization of a company is the market value of net worth. Book value of net worth is calculated as total assets minus total liabilities. Hence, market capitalization (representing market value of equity/net worth) is not a substitute of book value of assets. At best, the book value of equity (net worth of company) can proxy for market capitalization, although many differences exist between the book value and market value. Selection of a base is required to set tolerance limits for liquidity, interest-based debts, and *ḥarām* investments. How can the degree of Sharī'ah norms' violation be judged? Is it to be judged at firm level as a unit comprising assets and liabilities plus equity? Equity is the net worth of the business (assets minus liabilities). Judging the degree of non-compliance on equity level is not appropriate because equity represents a portion of going concern. Using market capitalization as bases for calculation has been questioned in the literature. For example, Khatkhatay and Nisar, (2007, p. 65) postulate that equity markets are driven by sentiments about future cash flows and many factors including past performance, manipulations, government policies, political developments, etc., or any other factor, may generate positive/negative sentiments on a particular day. Obaidullah (2009, p. 77) documents that the use of replacement value of assets could be a better proxy than market capitalization. It is argued in the favor of total assets over market capitalization on account of the following reasons:

- Market value is affected by many external factors beyond the control of the management of the company including noise trading, irrationality, political factors, etc.
- Additionally, only liquid assets do not represent net worth of the company, that is partly owned by an investor, rather it is a combination of

liquid and illiquid assets, hence, the contribution of liquid assets should be assessed on the basis of total assets.

- Furthermore, it is appropriate to use book value of all assets, also including the liquid assets as per the Sharī'ah principles, as disclosed in the light of financial reporting standards or at most, replacement value (in case of fixed assets).
- Also, conventional accounting practices have preferred historical cost/book value (of fixed assets) for financial reporting – over market value – on account of reliability and consistency, traditionally. Market value is subjective and changes over time. Some Sharī'ah screening agencies use 24 to 36 months average market capitalization, which is an evidence of the severity of the issue, i.e., variations of the market value of the underlying firm over the period. Using the average of more than six months, or at most one year, is irrelevant in case of market capitalization because the resulting figure is far from the reality of the current amount of wealth.

3.3 *Ḥarām* Investments

The modern business environment is based on capitalism/market economy, and the prevailing norm is to sell whatever you can at a price whatever you get. Market forces – demand and supply – will determine the quantity required and the price established. There is no ethical filtration in many cases except (maybe) on medical grounds. Under Islamic system, liberty is limited, and activities are monitored through ethical filters. Keeping this principle in view, there are some activities in modern businesses which are declared *ḥarām* by the Sharī'ah. For example, dealing in liquor, pork, casino, *ribā*, pornography, etc. If a company is engaged in any prohibited activity as its core business, such a company is out of the Sharī'ah compliant investment universe. However, there are companies whose core business comprises of *ḥalāl* activities with some segment of *ḥarām* operations too (e.g., hotels and airlines, and/or using conventional financial services, etc.). The purist approach is to refrain from investment in such companies. However, there are advocates of investment in such companies with certain tolerance limits. This issue of investing in stocks of companies with *ḥarām* element

in their activities, is expected to be addressed, partially, with the maturity of the Islamic financial system. Considering this issue, Sharī'ah boards of various screening agencies have set a limit for *ḥarām* investments by a company with core/principal activity in line with Sharī'ah law (Table 1). An examination of the table suggests that Sharī'ah boards of sample agencies engaged in the screening of Sharī'ah-compliance universe of stocks are unanimous on the figure of 1/3rd except for AAOIFI where it is 30% instead. Differences in use of the denominator/base are present in this case too, which has already been analyzed in the previous section and the preference for the use of total assets was documented.

3.4 Interest-Based Debts

One of the features of modern corporations is the overwhelming use of debts in financing their operations. Modern finance theories suggest the use of debts in an optimal capital structure. The temptation to use debts by corporations is because of two reasons.

- First, the cost of debt is low as compared to the cost of equity because from the investors' perspective, debt instruments are less risky than equity instruments due to the payment of fixed return irrespective of the outcome of the project financed through debt money; and preference in payment of interest and refund of capital to debt holders over equity holders.
- The second reason of the overwhelming use of debt is a tax benefit. In common British laws, as well as under international accounting standards' regime, interest paid to debtholders is a pretax expense, resulting in a lesser amount of income taxes by corporations.

Given the dominance of the conventional financial system, firms use their financial services. From an equity investor's perspective, debt-based money used by a corporation results in the generation of profits being shared with investors. Such an activity is questionable from a Sharī'ah perspective. Sharī'ah boards of various Sharī'ah screening agencies have set limits for interest-based debts (Table 1). Tolerance limits range between 30% (AAOIFI) to 37% (KMI), while the majority has focused on 1/3rd

of either total assets or market capitalization. Perhaps total assets base at book value or replacement cost is more relevant for the calculation of this ratio because debts are employed to finance assets and operations of the company, in the hope to create value for investors. In addition, the limit for interest-based debts and *ḥarām* investments, set initially, should be reduced, gradually, taking into account the spread of Islamic financial services industry (IFSI). Mansoori and Khan, (2015, p. 65) postulate that increasingly, the IFSI has the potential and capacity to meet the working capital needs of the companies through *ijārah*, *salām*, and *istiṣnā'*, and thus, need for interest-based borrowing reduces (in certain jurisdictions). Similarly, the IFSI is mostly liquid, so the corporations have a chance to opt for permanent (stocks) or time-bound (Sukuk or certificates) equity-based capital.

3.5 *Ḥarām* Income

Ideally, *ḥarām* portion of income should be zero for a Sharī'ah-compliant business. However, given the widespread dominance of the conventional financial industry, firms have to use their financial services. Companies keep their idle funds in interest-based bank accounts as well as short-term marketable securities as part of liquidity management, resulting in the generation of some *ḥarām* income. In addition, there are some companies whose core business is *ḥalāl*, but a portion of their income is generated through *ḥarām* sources (e.g., air transportation and hospitality sector). Equity investment with certain tolerable limits is allowed in such companies, as discussed in the previous section. Although investment in *ḥarām* avenues is tolerated to a greater extent (the majority of the screening services tolerate up to 1/3rd), however, the tolerance level of *ḥarām* income, set by Sharī'ah boards of various agencies, is very low (Table 1). Except for SCM, all agree on the 5% limit for income from prohibited activities. SCM agrees with others in case of *ḥarām* income. However, it generated another benchmark of up to 20% for doubtful activities – including hotel and resort operations, share trading, stockbroking business, rental received from Sharī'ah non-compliant activities, and any other activity deemed non-compliant according to Sharī'ah (Zainudin et al., 2014, p. 83).

As for the denominator or base of *ḥarām* income ratio is concerned, all agree on total revenue/sales. The revenue of a firm can be classified as operating, which emerges from direct operations like sale of goods, and non-operating coming through investments in other businesses. Usually, interest income is net income while sales revenue is gross income because expenses are to be deducted from it to make it distributable to owners of the business. Distributable income from operation is much lower than sales income. To analyze whether total revenue is an appropriate base for setting the limit of *ḥarām* income or not, we need to look into the following aspects.

- Interest income is generated through investment in interest-based securities (bonds, preferred stocks, commercial papers, bank deposits, etc.). This is a passive portfolio management strategy. Hence, the amount of resources (except invested capital) and time required to generate this income is minimal as compared to core activities of a real sector business. Normally, it is a net income.
- Sales revenue is generated by selling goods which requires a greater amount of effort and resources. To reach operating income, expenses on the cost of goods sold (either purchase price of inventories and/or manufacturing expenses of finished products), as well as operating expenses – including marketing and selling expenses, administration and general expenses – are deducted from sales revenue.
- Also, there are finance charges and income tax considerations, and only earnings after tax belong to owners. Usually, income tax on interest income is deducted at sources. Hence, a proper comparison of *ḥalāl* and *ḥarām* income should be upon earnings after tax – the amount that belongs to owners. Even if we ignore tax and finance charge considerations, the comparable amounts of *ḥarām* and *ḥalāl* incomes are interest earned and operating profit declared, respectively.
- Even if we do not consider interest income as a passive portfolio and assume that operating costs incurred by firms are meant for both operations – *ḥarām* and *ḥalāl* – still sales revenue is not comparable with interest income. At least, we have to deduct the cost of sales from

sales revenue to make it comparable with interest income – as there is no cost of goods sold for interest income. Therefore, by this very liberal measure, gross profit of firms is the comparable *ḥalāl* income with interest income.

What difference emerges in changing the base for *ḥarām* income? A very careful estimate of gross profit on sales is not more than 20-25% for real sector businesses. Hence, the tolerance limit of 5%, agreed on the basis of minority/negligibility, (Hashim et al., 2017, p. 32) looks misconceived. In reality, 5% of sales is equal to 25% of gross profit, if the gross profit margin is 20% of sales. We have taken data from combined income statements of non-financial sector listed firms in Pakistan (SBP, 2008), for six years (2003-2008) and the analysis is presented in table 2.

An examination of the table reveals that the contribution of 5% of sales to income belonging to shareholders is an average of 32% – based on operating income (ignoring finance charges and income taxes). Additionally, the contribution of *ḥarām* income to the total income of firms – which is equivalent to 5% of sales – based on gross income is 24% on average during the period under review. These calculations have two implications:

- First, whether the tolerable limit in case of *ḥarām* income – based on income belonging to shareholders – is acceptable beyond 5% or not from a Sharī'ah perspective.
- Second, the purification rate announced by Sharī'ah screening agencies is 5%; while the contribution of *ḥarām* income in distributable profits – before finance charges and taxes – is more than 5% (it is 32% based on operating income and 24% based on gross income on average). Therefore, the purification of income is incomplete.

Based on the above discussion, we suggest that the *ḥarām* income tolerance limit should be based on operating earnings – assuming administration cost is for core activity only – or being very liberal, it should be based on gross profit. We cannot support the use of sales revenue as a basis for establishing the tolerance limit for *ḥarām* income because it is a fact that in the case of sales, cost of inventory is to be deducted, which is absent in the case of interest income. Hence, both are not comparable incomes.

Table (2) Analysis of Income based on Real Data

Description	2003	2004	2005	2006	2007	2008	Average
	Millions	Millions	Millions	Millions	Millions	Millions	Millions
Ḥarām Income	69,124	81,642	101,561	128,548	141,896	173,562	116,055
Limit 5% of Sales							
Operating Income	130,931	199,205	254,458	305,994	296,426	301,974	248,165
Total Income	200,055	280,847	356,019	434,542	438,322	475,535	364,220
Share of ḥarām income % of total	0.35	0.29	0.29	0.30	0.32	0.36	0.32
Gross Profit	210,041	272,673	358,493	404,602	406,796	506,629	359,872
Total Income	279,165	354,315	460,054	533,150	548,692	680,191	475,928
Share of ḥarām income % of total	0.25	0.23	0.22	0.24	0.26	0.26	0.24

Source: Calculated by the author based on data from State Bank of Pakistan – financial statement analysis of non-financial sector companies listed at the Karachi Stock Exchange (<http://www.sbp.org.pk/publications/Pub-Ann.htm>).

3.6 Tolerance Limits

What is the appropriate tolerance limit of *ḥarām* investments, application of interest-based debts and *ḥarām* income for a corporation from a Shari'ah perspective? There is nothing specified in the original sources of Islamic law - including the Qur'ān and the Sunnah. Institutional settings of modern businesses are recent developments in an era of colonization of Muslim societies. However, under an Islamic framework, doors for juristic opinions (*ijtihād*) remained open throughout the history. The purist approach would not allow investment in any of these companies on account of many questionable operations – including speculation in trading, prohibited means of marketing and sales, indulging partly in prohibited business activities, damaging environment through industrial pollution, involvement in *ribā*, *gharar*, etc. However, a large number of Shari'ah scholars support the idea of participation and competition in the modern world with certain restrictions. This class of scholars allows investment in modern corporations and suggests these restrictions. Justification or bases for participation in the process are well recorded in AAOIFI, (2015) as under:

The basis for exempting trading in the shares of these corporations, whose primary activity is permissible, however, they deposit amounts and borrow on the bases of interest, is the application of the rule of removal of hardship and acknow-

ledging of general need, widespread practice, the acknowledged principles of surplus, shortage and predominance, as well as the permissibility of dealing with one the major part of whose wealth is permissible, along with reliance upon the issue of separation of bargains according to some jurists. This is upheld by most *fatwā* issuing organizations as well as the Shari'ah supervisory boards of Islamic banks. (pp. 573-574)

What is the rationale of using 1/3rd limit in case of *ḥarām* investments and interest-based debts? A *ḥadīth* is quoted where Prophet Muhammad (may the peace and blessings of Allah be upon him) advised *Sa'ad* (may Allah be pleased with him) not to give more than 1/3rd of his property in charity.

Narrated Sa'd: The Prophet (may the peace and blessings of Allah be upon him) visited me at Makkah while I was ill. I said (to Him), I have property; May I bequeath all my property in Allah's Cause? He said, No. I said, Half of it? He said, No. I said, One third of it? He said, One-third (is alright), yet it is still too much, for you'd better leave your inheritors wealthy than leave them poor, begging of others. Whatever you spend will be considered a *sadaqah* for you, even the mouthful of food you put in the mouth of your wife. Anyhow Allah may let you recover, so that some people may benefit by you and others be harmed by you. (al-Bukhari, 1997, 7:174, *ḥadīth* no. 5354)

Also, there is an established *fiqh* rule about a commodity that is part gold and part brass; it qualifies as gold – if the percentage of gold is greater than 33.33% – for purposes of applying the rules of *ribā* (Obaidullah, 2009, p. 77). Additionally, the *ḥarām* portion is less than or equal to half of the *ḥalāl* portion. Maybe experts took into account these considerations while deciding tolerance limits.

It is pertinent to note that these concessions are provided by taking into account the prevailing business environment and are in no way proven from Shari'ah law. Hence, tolerance limits should be based on need rather than allowing the luxury of doing things repugnant to Islamic law, under the umbrella of Shari'ah-compliance. The next question would be; how much concession is needed to be considered genuine? The correct answer would be; it may vary from jurisdiction to jurisdiction and firm to firm, based upon institutional settings around. In certain countries (e.g., Malaysia, and Gulf region), the contribution of Islamic finance assets in total assets is higher as compared to other regions, hence, tolerance limits should be different. However, for developing an upper limit, an analysis of the existing practice, in a particular market, would be helpful to a great extent, as applied by Khatkhatay and Nisar, (2007, p. 69) on the Indian market (BSE 500). They document that realistic limits based on needs would be debts to total assets < 25%; investment in interest-based assets to total assets < 10%; and interest to total income < 3%. For corporations, qualified on business screens, averages of concessions should be calculated to fix tolerance limits. In addition, averages of concessions based on sectors would be a more refined strategy. Obaidullah, (2009, p. 78) challenges the 5% limit with a qualification that there should be no *ḥarām* income “by intention”. Hashim et al. (2017, p. 32) justify the threshold of 5% of *ḥarām* income because of minority/negligibility, and that the investors’ participation may not be considered as a contribution to the growth of prohibited activities.

3.7 Purification of Income

As for the tolerance limit of the contribution of *ḥarām* sources up to 5% of total revenue is concerned, it is decided on the basis of need and negligibility/minority, taking into account the prevailing financial services environment – dominated by the

conventional financial industry. We do not agree with using revenue as a base for calculation for reasons recorded in the previous section. However, an Islamic investor must purify the income earned from investment in such a corporation by spending the *ḥarām* income for charitable purposes. Eating *ḥarām* income is not allowed under any school of thought – including purists and others. To purify income from such a corporation, we need to look into probable sources of income. An investor receives benefits by investing in a corporation in the form of cash dividends, bonus shares, rights to buy additional shares/stock warrants and capital gains by disposing of investments. As far as cleansing of income from cash dividend is concerned, it is pretty simple. It can be done on a *pro-rata* basis. If a person receives \$100 as cash dividend and the ratio of *ḥarām* income is 4%, all he needs to do is to spend \$4 in charity. In case of Islamic mutual funds or any other Islamic investment organization, such an arrangement can be done at the institutional level. However, AAOIFI, (2015, p. 564) states: “The subject-matter of elimination is the prohibited income specific to the share whether or not the profits have been distributed and whether or not the corporation has declared a profit or suffered a loss” (p. 564).

As per AAOIFI guidelines, an investor needs to look into financial reports of the company, determine his/her share of *ḥarām* income, based on the percentage of stock holding, and spend such part of income on charity. Following AAOIFI, means an investor replaces his share of capital equal to *ḥarām* portion in the firm by giving away charity from his personal wealth. However, in practice, income purification ratio is announced by Shari'ah-screening agencies. According to Hashim et al., (2017, p. 36), ISRA-B procedure of cleansing includes:

- Cash dividend is purified at the time of distribution by the company;
- Non-cash benefits (bonus shares, warrants, options, or others) are purified at the time of cash inflows to the investors in the future, and;
- No cleansing is required for capital gains.

Clearly, there is a difference in cleansing methods as suggested by AAOIFI, and Islamic index providers. AAOIFI suggests purification of income at a time when financial reports are issued and investors

become aware of *ḥarām* income – whether reports are interim or final, whether as a whole the company is earning profit or suffering loss, whether the dividend is distributed or not. In such a case, the issue of purification of non-cash benefits including bonus shares, right shares/stock warrants and options does not emerge. AAOIFI is silent on the purification of capital gains. However, in practice, the focus of Sharī'ah-screening agencies is on purification of dividends only. In other words, the practice is following the principle of cash flows to the investor. This is a clear deviation from the guidelines of the apex body AAOIFI, engaged in the preparation of guidelines for Sharī'ah-compliance in Islamic financial institutions. Undoubtedly, cleansing based on cash flows to investors holds some ground, especially operational advantage. However, uniformity among AAOIFI and operational organs is vital for the success of the Islamic finance industry. Additionally, if a company does not pay dividend – hence no cash flows to investor and no purification – it means the company has projects with positive Net Present Value (NPV), resulting in an increase in the net worth/market price (Modigliani & Miller, 1958, p. 289). Hence, capital gains to investors should be purified. Purification of capital gains' mechanism is absent at present from the Sharī'ah-screening methodology of sample institutions.

4. Sharī'ah Compliance Rankings

This rating mechanism is meant for refinement in the existing process of Sharī'ah compliance universe and does not cover all Islamic principles of business, covered in section 2. It covers only agreed upon filters. It is clear that the tolerance limits are not proven from the original sources of Islamic law – the Qur'ān and the Sunnah. These limits are allowed as concessions; merely, on the basis of “removal of hardship and acknowledging of general need” (AAOIFI, 2015, p. 573). Hence, it would be appropriate to rank the companies based on the amount of concessions availed – the level of involvement in prohibited activities. A firm with 80% of liquid assets, 37% of interest-based debts, 33% of Sharī'ah non-compliant investments coupled with 5% of *ḥarām* income cannot be as good as a firm with half or a quarter of these ratios, from a Sharī'ah-compliance perspective. To the knowledge of the author, none of the institutions – engaged in the

filtering of Sharī'ah-screening universe – provide such rankings. Such a ranking of Sharī'ah-compliant companies is recommended on account of following considerations:

- A conservative portfolio manager and/or investor would be able to select highly ranked stocks on Sharī'ah-compliance criterion in addition to being lucrative on business and financial fronts. It is preferred to have lesser violations of Sharī'ah-norms – resulting in a journey towards more conservatism and *ḥalāl* operations.
- The management of listed companies interested in broader market participation (tapping the opportunities of Sharī'ah-compliant investment funds) – resulting in more demand for securities and an upward movement of market price – will take a pressure to lower limits of non-compliant activities in practice.
- A large number of conservative Muslim consumers would prefer to use products of companies ranked higher on Sharī'ah-compliance criterion.
- Financial rankings of companies and investment instruments are common, resulting in the confidence of investors. In case of Islamic investors, they are concerned with financial strength as well as the level of Sharī'ah-compliance of investee companies.

Such a ranking of stocks, after going through business screening, would be based on scores assigned to each segment/criterion. So far, four criteria – limits for liquid assets, *ḥarām* investments, interest-based debts, and *ḥarām* income – to judge Sharī'ah compliance of underlying firms have been suggested and practiced. Whether weights of all these four factors are the same as far as Sharī'ah-compliance is concerned or not? An Analysis reveals that the liquid assets' test is either not included in the screening criteria – SCM and ISRA-B – or the tolerance limit is set very high (AAOIFI 70%, KMI 75%, FTSE 83%, MSCI 66%). While the tolerance limit of *ḥarām* income is very conservative of 5% of revenue, agreed by all sample institutions, engaged in Sharī'ah-screening process of companies, and even then, purification of income is required. In case of *ḥarām* investments, all agree on 1/3rd except AAOIFI which sets the limit at 30%. In case of the limit of interest-based debt, it

varies from 30% (AAOIFI) to 37% (KMI), with an agreement of rest of the sample institutions at 1/3rd. This analysis clearly indicates that in Shari'ah-compliance terms, *haram* income test has got more importance/focus than liquid assets' test, while the other two screens of interest-based investments and interest-based debts are close to each other or equal in weight and lie between the limits of *haram* income and liquidity. Our suggested weights out of 100 are 25 for each of interest-based debts and interest-based investments, while 30-35 for *haram* income and 15-20 for liquidity tests. Once these weights are agreed upon, then every company can be assigned a score (Shari'ah-boards, regulators, and AAOIFI are the highest policy-making bodies and best forums to debate on weights).

Score calculation is based on opposite order – having lesser concessions means more Shari'ah-compliance and higher score. For example, a company which has invested 1/3rd of total assets in *haram* investment avenues as compared to another company which has invested zero percent in Shari'ah non-compliant avenues, then the score of the former and later would be 0 and 25 respectively on this screening criterion. Additionally, if a company's *haram*

investments are limited to 20%, then its score would be: $9.84 = 25 * [(33-20)/33]$. Once these scores are calculated and added, companies can be placed into four groups [****, ***, **, *]. We know a company can reach to a score of 100 if it is not using any concession and another company can end up with a very low score if it is using all concessions, touching tolerance limits. Companies with a score of above 75 can be placed in ****, followed by a score between 51-75 in ***, a score between 26-50 in ** and finally, companies with low scores – below 25 – are awarded *, respectively. Given the high spread of 25 steps/scores for a group, such grouping can be extended to five or even ten groups. For illustration, four hypothetical companies are selected with data (Table 3) and results reported here, based on the following R-Score model.

$$R_t = 0.20L_t + 0.25D_t + 0.25I_t + 0.30E_t \quad (1)$$

Where

L_t = Unused % of Tolerance limit for liquidity;

D_t = Unused % of interest based debts limit;

I_t = Unused % of Haram Investments limit;

E_t = Unused % of Haram Income tolerance limit;

Table (3) Illustration of Shari'ah Compliance Ranking

Descriptions	<i>Haram</i> Income (HI)	Interest-based debts (IBD)	Prohibited Investments (PI)	Liquid Assets (LA)
Weightage	30	25	25	20
Maximum Limit	5%	33%	33%	80%
Company-A	2%	15%	18%	40%
Company-B	3%	20%	23%	50%
Company-C	4%	25%	28%	60%
Company-D	5%	30%	33%	70%

Source: Calculated by author, using hypothetical figures for illustration

Consider Company A, with 40% liquidity, 15% interest-based debts, 18% *haram* investments and 2% *haram* income;

$$R_t = 0.20 \left[\frac{(0.80 - 0.40)}{0.80} \right] + 0.25 \left[\frac{(0.33 - 0.15)}{0.33} \right] + 0.25 \left[\frac{(0.33 - 0.18)}{0.33} \right] + 0.30 \left[\frac{(0.05 - 0.02)}{0.05} \right]$$

$$R_t = 0.5299 \text{ OR } 53\%$$

Similarly, Company *B* scored 37%; Company *C* 21% and Company *D* 3% – resulting in ratings (***, **, *, *), respectively. As per results, Company *A* is at the top and Company *D* is at the bottom because Company *A* has used lesser concessions on every front and Company *D* has used more concessions – resulting in low grade (Table 3).

5. Summary and Conclusions

Although a good start has been made by designing a few screens, at least, to separate companies with fewer violations from companies with major violations of Shari'ah-norms, however, further developments are required for the higher degree of reforms in this respect. There are a few areas of concern regarding investment in modern corporations which need the attention of policy-making institutions. These concerns are reported below, very briefly.

- Whether or not asset structure should be considered and limit be established for maximum liquid assets, while it is well known that the basic purpose of a going concern (the company) is to trade in inventories, provide services, and generate revenue. Investment in a company is more linked with expected future revenue than existing assets of the corporation. Alternatively, investors pay for expected cash flows and not for existing assets of the company, although such assets are an important element in revenue generation along with the management team, customer relationships, system-development, and leadership status in generation and use of technology. Another aspect of this screening criterion is that many service-based organizations including education, healthcare, ICT, professional and financial services companies – including Islamic financial services companies – may find it difficult to pass this test, if not impossible, because of the lesser need of illiquid assets in their business model, by design. It is argued that the liquidity tolerance limit would be more useful if it is based on the realities of the business sectors. We recommend separation of liquidity limits for dealers in goods (manufacturing and trading) and dealers in services (banking, insurance, professional services, ICT, healthcare, and education).
- While deciding the tolerance limit for Shari'ah-norms' violations in the areas of liquidity, *haram* investments, and interest-based debts, two different bases – total assets and market capitalization – are being used in practice. This is not an issue of using book value or market value of equity stake. It is an issue of using equity value/net worth; versus business/firm value as basis for calculation of tolerance limits. Total assets of a business represent equity as well as liabilities, while market capitalization represents net worth of the business (market value of assets – market value of liabilities). This needs to be streamlined as what is an appropriate base for such calculations. Total assets are preferred as basis for calculation over market capitalization on account of reasons recorded in section 3. Moreover, in case of the tolerance limit for *haram* investments and interest-based debts, whether or not gross liabilities (interest-based debts) as well as gross assets (interest-based investments) should be considered; or net position (assets minus liabilities) should be considered, especially when the base of net worth (market value of equity) is used. As the business includes assets as well as liabilities (plus equity), hence, use of gross assets (interest-based investments) and gross liabilities (interest-based debts) looks appropriate with a base of total assets – and not the net worth whether the market value or book value of equity is used.
- In case of *haram* income limit, using total revenue as basis for calculation is not appropriate on account of comparability of both types of income. Sales revenue is not distributable income like interest income. From sales income, a certain portion is meant for the cost of inventories and administrative expenses, hence, another base (e.g., the sum of operating income plus interest income; or the sum of gross profit plus interest income) may be agreed – as argued in detail in the relevant section.
- Empirics have documented variations in Shari'ah-screening process and negative implications – in the form of reduced market confi-

dence, and constraints in international portfolio diversification – and suggested standardization (Htay et al, 2013, p. 30; Zaidi et al., 2013, p. 251; Ho et al., 2011, p. 108). Standardization in business screening and maximum tolerance limits is appreciated (uniform at global level). However, tolerance limits in financial screening should be based on the needs of a particular market, taking into account average of companies, which cleared business screening, with appropriate upper limits (e.g., $< 1/3^{\text{rd}}$ for *ḥarām* investments and interest-based debts; $< 5\%$ for *ḥarām* income, and $< 2/3^{\text{rd}}$ for liquid assets). For example, if the average of Shari'ah-compliant companies in case of interest-based debts is 25%, in a particular market, then companies financing beyond this limit should not be included in the Shari'ah-compliant universe.

- All Shari'ah screening institutions agree upon the 5% limit of *ḥarām* income, and purification through spending on charity. However, differences exist at the operational level. AAOIFI suggests cleansing at the time of first reporting of *ḥarām* income to the investors, irrespective of net profit or loss for the period and cash flow occurred to the investors, while in practice, cash flow to the investors is pre-requisite for purification of income. Also, in case of purification of capital gains, neither AAOIFI has suggested anything regarding it, nor it is practiced. This is an important issue because income generated from *ḥarām* sources is clearly repugnant to injunctions of Shari'ah law and needs an immediate solution through uniformity in the process at the operational level. An AAOIFI-suggested method for purification is preferred. Purification of capital gains needs debate at the level of policy institutions including AAOIFI and Shari'ah boards.
- Companies with violations of Shari'ah-norms, up to tolerance limits, are using concessions which are suggested by scholars, taking into account the overall business environment and lack of political support to change the helm of affairs. As documented in AAOIFI (2015), the basis for the permissibility of investment in such companies, with certain restrictions, is the

“removal of hardship and acknowledging of general need” (p. 573), is not proven from the original sources of Islamic law – the Qur'ān and the Sunnah. Hence, even if a company is executing business within these limits, how come we name it Shari'ah-compliant? If these companies are Shari'ah-compliant, then what name we give to those companies, which are not using any of these concessions? After all, the status of both types of companies is not the same from a Shari'ah-perspective. Hence, it is recommended that a different identity may be assigned to these two different groups of companies. Definitely, the group without any concession (Shari'ah violation) deserves the name of Shari'ah-Compliant (SC). Moreover, the group with Shari'ah violations, up to tolerance limit, may be identified as Transitory Shari'ah Compliant (TSC) or any other appropriate identity. We suggest transitory identity because we want to convey to the next generation that such an arrangement was transitory due to the nascent stage of Islamic finance with the hope to get Shari'ah-compliant environment with the passage of time – where such concessions would no longer be needed, *Allah willing*.

- Filtration criteria were decided a decade ago (approximately) when the spread of Islamic financial services and industry volume was not as much as it is in these days. As per the GIFR (Dar & Azmi, 2017, p. 36), the volume of Islamic financial assets has increased from US\$1.0 trillion in 2009 to US\$2.3 trillion in 2016. Perhaps the KMI-Pakistan index was the latest one to be established (2008) and even that is now about a decade old. The AAOIFI standard no. 21 on financial papers (shares and bonds) was issued in 2004, but still tolerance limits are the same as were decided originally. Only the KMI has reduced tolerance limits for interest-based debts from 40 to 37%, and liquidity limit from 80 to 75%, which were incidentally higher than the others were originally. If the vision is to filter-out Shari'ah violations (concessions), gradually, then there should be a revision of limits downwards at an interval of one year – corresponding to the growth in IFSI.

- Marketing and selling aspects of corporations, being filtered for Islamic investors, have many questionable operations. Experts need to think about this aspect too while developing Shari'ah-compliance screens. What image of Shari'ah-compliance certification emerges, among the masses, when they see a questionable advertisement of a company, while at the same time, we call it a Shari'ah-compliant organization? In addition, a mechanism to measure human resource policies, honoring contracts, and applications of Shari'ah trading rules, as well as, payment of *zakāh* is missing in present Shari'ah-compliance screening system.
- Many large companies, primarily engaged in engineering/manufacturing, are creating industrial pollution and wastes dangerous to the health of humanity and damaging the environment. Should these companies – apparently doing *halāl* business – be considered for investment by Islamic financial institutions or investors? Present filtration mechanism do not filter them out from the Shari'ah-compliant universe.
- Present Shari'ah-compliant stock universe is based on certain concessions. It is appropriate to disclose the level of concessions availed by each constituent because the status is different, from Shari'ah-considerations, of firms with varied level of violations. Shari'ah-compliance ranking of constituents would help in the area of portfolio selection, building market confidence, and generation of pressure on management to use lesser concessions.

These findings are expected to benefit stakeholders of the Islamic financial system – including Shari'ah-boards, regulators, standard-setting bodies, investors and the general public at large. The findings, potentially, contribute to the literature for academic debates and better understanding of Islamic capital market. These findings bring into light some important Shari'ah-compliance aspects of modern businesses over-looked in earlier developments. Future research agenda includes Shari'ah compliance ratings of IFSI and critical review of *shukūk* methodologies.

References

- Abdul Rahman, A., Yahya, M.A., & Nasir, M.H.M.** (2010). Islamic norms for stock screening: A comparison between the Kuala Lumpur Stock Exchange Islamic Index and the Dow Jones Islamic Market Index. *International Journal of Islamic and Middle Eastern Finance and Management*, 3(3), 228-240.
- Accounting and Auditing Organization for Islamic Financial Institutions [AAOIFI].** (2015). *Sharia Standards*. Manama, Bahrain: Author.
- Ayub, M.** (2007). *Understanding Islamic Finance*. Chichester, UK: John Wiley & Sons.
- al-Bukhari, M.** (1997). *The Translation of The Meanings of Sahih al-Bukhari* (M.M. Khan, Trans.). Riyadh, Saudi Arabia: Darussalam publishers and distributors.
- Dar, H., & Azmi, S. (Eds.).** (2017). *Global Islamic Finance Report [GIFR]*. London, UK: Edbiz Consulting. Retrieved from: http://www.gifr.net/gifr_2017.htm
- Derigs, U., & Marzban, S.** (2008). Review and analysis of current Shariah-compliant equity screening practices. *International Journal of Islamic and Middle Eastern Finance and Management*, 1(4), 285-303.
- FTSE Russell.** (2017). *FTSE Shariah Global Equity Index Series v2.9*. Retrieved from: http://www.ftse.com/products/downloads/FTSE_Shariah_Global_Equity_Index_Series.pdf
- Global Sustainable Investment Alliance [GSIA].** (2016). *Global Sustainable Investment Review*. Retrieved from the Global Sustainable Investment Alliance website: http://www.gsi-alliance.org/wp-content/uploads/2017/03/GSIR_Review2016.F.pdf
- Hashim, A.M., Habib, F., Isaacs, Z., & Gadhoum, M. A.** (2017). ISRA-Bloomberg Shari'ah stock screening and income cleansing methodologies: a conceptual paper. *ISRA International Journal of Islamic Finance*, 9(1), 27-42.
- Ho, C.S.F., Abdul Rahman, N.A., Yusuf, N.H.M., & Zamzamir, Z.** (2011). Comparison of Quantitative Shari'ah-Compliant Screening Methods. *ISRA International Journal of Islamic Finance*, 3(2), 91-110.
- Htay, S.N.N., Abedeen, Z., & Salman, S.A.** (2013). Towards Standardization of Shari'ah Screening Norms and Practices. *International Journal of Humanities and Social Science Invention*, 2(11), 23-30.

- Islamic Fiqh Council [IFC].** (1995). *Ruling on buying shares of companies and banks if some of their transactions involve ribā*. Retrieved from: <http://en.themwl.org/2012/05/23/resolutions-of-the-islamic-fiqh-council-14th-session-1415h>
- Khatkhatay, M.H., & Nisar, S.** (2007). Shari'ah Compliant Equity Investments: An Assessment of Current Screening Norms. *Islamic Economic Studies*, 15(1), 47-76.
- Mansoori, M.T.** (2007). *Shariah Maxims: Modern Applications in Islamic Finance*. Islamabad, Pakistan: Shariah Academy, International Islamic University.
- Mansoori, M.T., & Khan, A.** (2015). Investment in Equities: Shari'ah Appraisal of Screening Norms. *Journal of Islamic Business and Management*, 5(1), 51-68.
- al-Meezan Investment Management Ltd.** (2017). *Investor Education – Shari'ah Methodology*. Retrieved from: <https://www.almeezangroup.com/investor-education/shariah-methodology/>
- Modigliani, F., & Miller, M.H.** (1958). The Cost of Capital, Corporation Finance and the Theory of Investment. *The American Economic Review*, 48(3), 261-297.
- Morgan Stanley Capital International [MSCI].** (2011). *MSCI Islamic Index Series Methodology*. Retrieved from: https://www.msci.com/eqb/methodology/method_docs/MSCI_May11_IslamicMethod.pdf
- al-Munajjid, M.S.** (2013, May 28). Ruling on buying and selling shares. Retrieved from: <https://islamqa.info/en/112445>
- Obaidullah, M.** (2005). *Rating of Islamic Financial Institutions: Some Methodological Suggestions*. Jeddah, Saudi Arabia: Scientific Publishing Centre, King Abdulaziz University.
- Obaidullah, M.** (2009). Some Issues in Shari'ah Compliance and Regulation of Islamic Funds. *Journal of King Abdulaziz University: Islamic Economics*, 22(1), 191-193.
- al-Osaimi, M.B.S.** (2005, Oct 30). *Hukm al-Mudarabah fi al-Ashum al-Mukhtalith* [The ruling on investment in mixed stock]. Retrieved from: <http://qa.halal2.com/1201>
- al-Qaradawi, Y.** (1960). *The Lawful and The Prohibited in Islam*. Cairo, Egypt: Al-Falah Foundation for Translation Publication and Distribution.
- Rehman, S.S., & Askari, H.** (2010). An Economic Islamicity Index (EI²). *Global Economy Journal*, 10 (3), 1-37.
- S&P Dow Jones Indices.** (2017a). *S&P Shariah Indices Methodology*. Retrieved from: <http://us.spindices.com/documents/methodologies/methodology-sp-shariah-indices.pdf>
- S&P Dow Jones Indices.** (2017b). *Dow Jones Islamic Market Indices Methodology*. Retrieved from: <http://us.spindices.com/documents/methodologies/methodology-dj-islamic-market-indices.pdf>
- Saged, A.A. G., Alhaj, T.A.A., & Bi, M.Y.Z.** (2017). The role of the Maqāsid al-Shari'ah in preserving the environment. *Humanomics*, 33(2), 125-132.
- Sani, N.A., & Othman, R.** (2013, June). *Revision of Shari'ah Screening Methodology: The Status of Shari'ah Compliant Companies in Malaysia*. Paper presented at the 3rd International Conference on Management, Penang, Malaysia. Retrieved from: http://nuradli.com/004_056_3rdICM2013_Proceeding_p051.pdf
- Statistics & DWH Department, State Bank of Pakistan [SBP].** (2008). *Financial Statement Analysis of Companies (Non-financial) listed at Karachi Stock Exchange*. Retrieved from: <http://www.sbp.org.pk/publications/Pub-Ann.htm>
- Usmani, M.I.A.** (2002). *Meezan Bank's Guide to Islamic Banking*. Karachi, Pakistan: Maktaba Ma'ariful Quran.
- Zaidi, S.A.H., Shah, I.H., Ashraf, R.U., Ghauri, S.M. K., & Hassan, I.** (2015). Standardization of Islamic market indices. *International Journal of Commerce and Management*, 25(2), 240-256.
- Zainudin, N.B., Miskam, S.B., & Sulaiman, M.B.** (2014, May). *Revised Shariah Screening Methodology For Shariah-Compliant Securities: New Standard To Meet Global Expectation*. Paper presented at the Conference on Management and Muamalah, International Islamic University College Selangor, Malaysia. Retrieved from: https://www.isfin.net/sites/isfin.com/files/revised_shariah_screening_methodology_for_shariah-compliant_securities_new_standard_to_meet_global_expectation.pdf

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عملية التدقيق الشرعي لأسواق رأس المال: تقييم المنهجيات

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أستاذ مساعد المالية، كلية إدارة الأعمال، جامعة عجمان، الإمارات العربية المتحدة

المستخلص. تسلط هذه الدراسة الضوء على أساليب وعمليات تصنيف الأسهم وفقاً لمتطلبات الشريعة الإسلامية لتصنيف الأسهم من ناحية مهنية وشرعية. قمنا بتحليل نقدي لثمان مؤسسات لاختبار مدى التوافق مع مبادئ الشريعة الإسلامية. خلصت نتائج الدراسة إلى وجود العديد من السلبيات العملية منها: ما هو مخالف لأسس الشريعة الإسلامية، الاختلاف في أسس التقييم (قيمة الأصول للقيمة السوقية)، عدم كفاية أساليب تطهير الدخل وفقاً للمنهج الإسلامي، عدم وضوح تطبيق نظم البيع، ضعف مراجعة حدود التفاوت، الفجوة في مواكبة نمو سوق التمويل الإسلامي، وكذلك الإخفاق في بعض الجوانب المتعلقة بعدم التحقق من بعض الممارسات البيئية وواقع عمليات البيع. تقترح الدراسة نموذجاً متوافقاً مع مبادئ الشريعة الإسلامية لتصنيف أسهم الأسواق الإسلامية في إطار متفق عليه ومبني على درجة الانحراف عن المبادئ الشرعية.

الكلمات الدالة: سوق رأس المال الإسلامي، الفرز الشرعي، التمويل الإسلامي، المؤشرات الإسلامية، التجارة الإسلامية، محفظة الأوراق المالية الإسلامية، تطهير الدخل.

تصنيف JEL: G10

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