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Analysis of Sharīʻah Based Equity Screenings: Developing a Sharīʻah-Compliant Index for Qatar Stock Exchange

MONZER KAHF•
EMAN MOHAMMED AL-HAJJAJI≠

Abstract

Although, any amount or portion of Haram is not permissible in Sharīʻah. *An exception has been addressed on the basis of the* Sharīʻah-*established maxim of "necessities call for relaxation of prohibition."*[1] *This allows investing in companies that engage in some non-permissible transactions (mixed companies) to a certain tolerable extent, provided that the financial outcomes of these transactions are purified by giving the part that is not-permissible to charity. Identifying mixed companies that Muslims can invest in is done by using specific* Sharīʻah *screening criteria that exclude out of the universe of all listed companies in a specific market those companies with returns emanating from non-permissible activities beyond certain threshold limits. This paper identifies the screening criteria used by seven Islamic indices, compares and contrasts between them and tries to examine whether it is time to have an Islamic index with no tolerance to non-permissible activities using Qatar as a case study. It is found that there exists a number of differences among Islamic indices which have impact on the Muslim investors level of freedom through their impact on the universe of Halal equity assets. It is also found that an Islamic index with zero-tolerance to non-permissible activities may be constructed for Qatar Stock Exchange without losing much of freedom of choice in this market. A comparison between the proposed zero-tolerance index and the already existing Al Rayan Islamic index shows that there are no differences in their respective behaviors. This indicates that having companies*

• Hamad Bin Khalifa University, Doha-Qatar, email monzer@kahf.com
≠ Hamad Bin Khalifa University, email eman.alhajjaji@gmail.com

[1] A rule that accompanies the jurisprudential maxim "hardship begets ease" that is based on the Ayah: "He has not laid upon you in religion any hardship" (22:78).

that do some non-permissible activities and having non-permissible income in the "Islamic basket" of listed companies is not necessary in Qatar.

This paper consists of five sections. The first section provides an introduction to the presented topic. The methods that are used for Sharīʻah *investment screening are discussed in section two. The third section includes a comparison of the screening criteria that are currently used by major index providers. The creation of an Islamic index with Zero-tolerance in Qatar Stock Exchange is illustrated in section four. The last section consists of conclusions and recommendations.*

Keywords: Islamic Equity Market, Equity Screening, Islamic Finance, Qatar

JEL Classifications: G10 ; G19 ; Z12
KAUJIE Classification: I73 ; I75

1. Introduction

The OIC Fiqh Academy stated in its resolution No. (63/1/7) Date (May 1992) that, when investing in shares, the principle is to avoid companies that have any non-permissible things or activities and to have zero tolerance to all Haram. However, the resolution left room to deal with situations of necessity or hardship and did not explicitly prohibited investment in shares of all companies that may involve in some non-permissible activities, considering the current market structures and business environment. In the market, as it is today, Muslim investors have to deal with companies as they are especially with regard to the non-availability of Islamic finance in many markets. To allow Muslim investors to be a part of the equity market, scholars came up with tolerance levels that sort companies according to the extent of their Haram activities and to suggest as Sharīʻah-compliant those companies that have the least of such activities, the shares of these companies can be part of an Islamic Index. Companies operate in different countries and face different market environments and degrees of accessibility to Islamic financial services. Thus, using the same tolerance level in the Sharīʻah screening criteria of most countries is not logical.

In a country like Qatar, where there is a good number of companies that declare themselves as Sharīʻah-compliant relative to the total number of listed companies in the stock market, such a tolerance is most likely unneeded and an Islamic index that consists of these companies only can be developed. Qatar equity market already has an Islamic Index (Al Rayan Islamic Index), which has the same tolerance level as other major Islamic indices which are created mainly for the Western markets in which one can rarely find a listed company that fully abides by the Sharīʻah principles. Considering the small number of listed companies in Qatar equity market many of which declared Sharīʻah-compliance, having the same tolerance level applied in the West may seem unjustified. To address this critical issue and to ensure providing an entirely Sharīʻah-compliant investment option for Muslims in Qatar, this paper will attempt to construct an Islamic index that consists of companies fully operating under Sharīʻah laws and regulations and test whether such an index offers adequate investment choice and freedom as that which conventional investors enjoy in Qatar equity market.

2. Sharīʻah Investment Screening Methods

Sharīʻah screening process includes a qualitative test and a quantitative test that any company must pass to be classified as Sharīʻah-compliant.

2.1 Qualitative Screening

Qualitative screening is related to the core of company's business and its objective, that is the main activity or the business field that the company focuses or based on. Hence the qualitative test applies to all companies and excludes companies that fall in the category of non-permissible products or activities. Companies whose businesses are permissible pass this test and companies whose business is not permissible in Sharīʻah fail this qualitative test. Accordingly, we exclude companies that produce or sell products or services that are clearly prohibited in Sharīʻah such as pork and alcohol products. This screen also excludes companies whose business operations are based on interest, *Gharar* (major ambiguity in the mutual obligations of the parties to an exchange) or any immoral activities that are against the principles of Sharīʻah.

2.2 Quantitative Screening

Companies that pass the qualitative test are examined for the quantitative test of Sharīʻah compliance. The quantitative screening focuses on some financial ratios. The rationale of these ratios is to determine a level of tolerance of non-permissible activities and income for companies with mixed activities. These mixed companies are most common in the Muslim world and internationally.

Quantitative screening consists of numerical calculation of three dimensions concerning the operations' structure of a company from its financial aspects. These dimensions are: the extent of its dependence on interest-based leverage, the relative size of non-permissible income and the extent of liquid assets that that the company holds. The quantitative screening is an ongoing test to ensure that the company continues to be in line with the required criteria as the financials of any company change over time. The qualitative screening is an ongoing process as well, but not as frequent as the quantitative screening.

Debt Level (Leverage Level)

Companies may rely heavily on debt to finance their operations, trading, expansion projects or investment activities such as acquisitions, etc. The prohibition of *Ribā* does not only means it is not permissible to receive interest but also it is not permissible to pay it too. Accordingly, if a company depends heavily on interest-based loans in its operations it can be argued that the results of its activities are actually generated by such prohibited loans and hence cannot be legitimized from Sharīʻah point of view.

Some flexibility in this regard has been addressed by Sharīʻah scholars to tolerate investing in companies that depend on conventional debts in their activities provided that such dependence remains below a certain level. The threshold of debt dependence should not usually exceed 33% of the market value of the company or of its total assets. If a company relies on interest-based loans beyond this level to finance its activities, what the company generates is subsequently Haram because the resources used to initiate these activities are Haram. As a Muslim, you are not supposed to be a shareholder of such a highly interest-leveraged company.

2.2.1 Relative Level of non-Permissible Income

The ratio used by the majority of index providers is that the total of non-permissible income should not exceed 5% of the total revenue of the company. This threshold covers interest and other non-permissible earnings that are reported in the company's financial statements. It includes interest on deposits at convectional or central banks, bonds, treasury bills and any type of interest generating security or financial service as well as income arising from any non-permissible good or service sold by the company or its subsidiaries. For example, a hotel whose main business activity is Sharīʻah-compliant but might have marginal non-permissible activities such as serving alcohol, if the revenue generated from this activity exceeds the given threshold it will not be classified as Sharīʻah-compliant.

Liquidity Level

This ratio covers cash and cash equivalent elements such as bonds, promissory notes and other short-term quasi-cash investments. From a Sharīʻah perspective, such assets often earn interest. Sharīʻah acceptable earning should be gained from business activities/assets of the company which are based on assets mix described as Sharīʻah compliant.

Additionally, cash and debts assets can only be exchanged at face value and if the company's major asset component is cash or debts the company's shares can't be traded except at par book value as the rules of *Ṣarf* and *Ḥawālah* will then be applied. This is supported by Ali Al-Quradaghi (2010, p. 162) who contended that shares of a company before it starts operation can't be traded except under the rule of *Ṣarf* because its assets are still mainly cash in banks not yet transformed into other assets. The liquidity screening is therefore needed to avoid trading stocks at premium or discount when it should be at par as Sharīʻah prohibits trading of debt or cash except at face value. According to the tolerance principle applied in all the seven indices studied in this paper, cash, cash equivalents and debts assets may not exceed 33% of total assets or market capitalization of the company.

However, some researchers (Khatkhatay & Nisar, 2007) argue that the reasoning behind this ratio is flawed because the market price of the share does not represent the amount of cash or cash equivalents in the company's accounting books, rather it represents market valuation, revenue and expectation for the future of the company's business.

OIC Fiqh Academy issued resolution number 188 (3/20) in 2012 and reaffirmed it in 2013 by its resolution number 196 (21/2) which maintain that companies' shares can be traded without looking at the percentage of cash and debt as the share represents a functioning company which is a legal and Sharīʻah-legitimate institution and its assets (any mix of cash, debts, properties, rights and benefits) are only subordinate (Tabi' تابع) to the company.[2] This is in application of the rule [Al-Tabi' Tabi' التابع تابع: a subordinate follows the rules of its principal]. Accordingly, Islamic banks and similar institutions may be traded as an institution regardless of the composition of their assets and the percentage of cash therein and without applying the rule of *Ṣarf*.

[2] On the other hand same resolutions emphasized that trading securities (Sukuk) that represent cash and debts separate from the legal ad Sharīʻah-legitimate institution that generates them is not permissible.

2.3 How Much Tolerance to non-Permissible Activities Do We Need?

The levels used and explained above are not based on clear-cut statements from the Qur'ān or the *Sunnah*. They are all opinionated and based on Ijtihad of Sharīʻah scholars and on interpreting statements not directly related to investment matters, which somehow justifies the difference in the thresholds between indexes. Scholars however offer justifications to use these thresholds or percentages. One of these justifications is a Sharīʻah maxim associated with the rule of majority which establishes that we apply to the whole what applies to its majority. Accordingly, many consider one third as not much as it does not come even close to be a majority for which we change our action.

Also, being small and negligible is raised to justify this position of tolerance. It is argued that if the amount of non-permissible income did not exceed 5% of total income it will be considered negligible since most of the money comes from halal sources and the amount of non-permissible income is little and can also be known from the company's financial statements and removed by giving it to charity (Al-Quradaghi, 2010, p 171).

Also, the prophet, pbuh, is reported to have said "one third and one third is even too much".[3] Therefore, the third is used to distinguish between what is few and what is many (Al-Omrani, 2005, p 83). That could be the main reason why the vast majority of Indices use a ratio between 30% and 33% for non-permissible activities.

These screening criteria were established to offer Muslim investors some flexibility and freedom of choice to have different investing options that if not fully abide by Sharīʻah laws are at least in the closest vicinity to them. The argument is that there is no sufficient number of fully Sharīʻah-compliant companies operating and listed in the main equity markets that could constitute a good investible portfolio. Apparently, the criteria of financial test indicate that efforts should be made to minimize the non-permissibility as much as possible. If fully Sharīʻah-compliant companies exist and Islamic financial services are available in a country such tolerance will be deemed unnecessary (Al-nadawi, 2012, p 16). That is because the necessity condition might no longer be applicable.

Since the principle is that there should be no tolerance to any haram activities and the above percentages should be all Zero, it is a must that these thresholds should be

[3] Reported by Muslim, No. 1628.

minimized when the investment environment allows it. Of course, this can't be the same for all countries and markets and the thresholds should be different from a country to another depending on the market situation and the availability of services that are in accordance with Sharīʻah. Giving the same threshold for all companies when in fact some companies have full access to Islamic finance services and others don't is unjustified. Furthermore, a relaxed tolerance, when it is proven not necessary, is not only in violation of the Sharīʻah rationale but actually is not to the benefit of the overall Islamic finance industry and the development of the infant Islamic capital markets. Sticking on to these criteria does not incentivize mixed companies to align their activities with the Sharīʻah standards and keeps Muslim investors in the hassle of purification calculation and giving up part of their earnings to charity. Tolerance criteria should be reviewed to reflect the current market circumstances and the business environment surrounding companies.

A study was conducted by (Al-Tunaiji) in 2009 showed that there are several fully Sharīʻah-compliant companies listed in the stock markets of different GCC countries. 23 in the Saudi market, 9 in the Qatari market and 10 in UAE. The author recommended reviewing the screenings to adjust them to the changes that happened in GCC due to the expansion the Islamic finance industry in the gulf region while discussing the necessity condition and whether it is truly still applicable currently in these markets.

Today, 8 years later, there are 18 companies that operate according to Sharīʻah laws in Qatar and more than 100 in in the Saudi market according to the Sharia Board of AlRajhi Bank.[4] This shows that there is a vital need to re-evaluate the screening standards according to the current business environment that these companies operate in.

3. Comparison of Islamic Equity Indices Screening Criteria

To illustrate the differences and similarities between the different Sharīʻah indices on real ground, this study will look into seven Sharīʻah-compliant indices created by seven different providers. They are selected because they are most commonly known world-wide along with AAOIFI standards for Sharīʻah screening which represents the AAOIFI Council of Sharīʻah experts in the field of Islamic finance from different countries. The screening for AAOIFI is given in the AAOIFI Sharīʻah Standard No. 21 that was issued on 2004 (AAOIFI, 2017, p. 568). The screening for Sharīʻah compliance is decided by the Sharīʻah board of the respective

[4] Retrieved on October 28, 2018 from https://www.argaam.com/ar/company/shariahcompanies

index. Thus, the Sharīʻah boards of Dow Jones Islamic Market index defines its screening ("S&P Dow Jones Indices", 2017, p. 26),[5] the screening of Standard & Poor's Sharīʻah Indices are given in ("S&P Indices", 2017, p. 5),[6] those of FTSE Sharīʻah Global Equity Index are available in ("FTSE Sharīʻah Global Equity Index Series", n.d.),[7] Al Rayan Islamic Index has its own Sharīʻah board that defines its own criteria ("Qatar Stock Exchange", 2013),[8] Meezan Index ("Pakistan Stock Exchange Limited",n.d.)[9] and Bursa Malaysia ("Securities Commission Malaysia", 2013, p. 144).[10] Information presented for each index is as disclosed on December 2017 on their official web pages.

3.1 Qualitative Screenings (The Sector Screening)

This sub-section identifies the prohibited sectors that will not be considered for the quantitative screening as defined by each index Sharīʻah methodology. The lists of prohibited sectors are presented in Table 3.1 below and will be followed by a brief comparison between the prohibited sectors in the selected indices.

Table 3.1:
Qualitative (Sector) Screening

Index	Prohibited Sectors Screening	Remarks
AAOIFI	The corporation does not state in its memorandum of association, by-laws or articles of incorporation that one of its objectives is to deal in interest, or in prohibited goods or materials such as pork and the like (AAOIFI, 2017, p. 563).	Does not have a distinct list or names for prohibited sector screening. They provided a general definition that includes all companies with activities prohibited in Sharīʻah. The indices derive their own list of prohibited sectors as well as financial screening ratios from AAOIFI guidelines, which might justify not having a list of prohibited sectors as the list that will be provided by AAOIFI might not be applicable or adequate for a specific country. This could be problematic in some sectors

[5] Retrieved February 06, 2018, from http://www.spindices.com/documents/ methodologies/methodology-dj-islamic-market-indices.pdf
[6] Retrieved February 06, 2018, from http://us.spindices.com/documents /methodologies/methodology-sp-shariah-indices.pdf
[7] Retrieved February 06, 2018, from http://www.ftse.com/products/indices/Global-Shariah
[8] Retrieved February 10, 2018 from https://www.qe.com.qa/qe-al-rayan-islamic-index
[9] Retrieved February 10, 2018 from https://www.psx.com.pk
[10] Retrieved February 06, 2018, from https://www.sc.com.my/

		like entertainment and media, unless additional details were provided.
DJIM (USA)	1. Conventional financial services 2. Alcohol 3. Pork-related products 4. Entertainment (hotels, casinos/gambling, cinema, pornography, music, etc.) 5. Tobacco 6. Weapons and defense	Excludes the whole sector without details that consider Sharīʻah compliant businesses or individual companies that might be compliant under some sectors like sports channels in the entertainment sector or a specific company under the media sector.
S&P (USA)	1. Conventional Finance 2. Alcohol 3. Pork 4. Pornography 5. Tobacco 6. Advertising of (pork, alcohol, gambling, tobacco and all other non-Islamic activities and Advertising means and modes which contravene the tenants of Islam) 7. Media & Entertainment (Producers, distributors and broadcasters of music, movies, television shows, musical radio shows and cinema operators). News channels, newspapers, sports channels, children's channels and educational channels are exempted. 8. Cloning 9. Gambling 10. Trading of gold and silver and currencies on deferred basis	The index does not include weapons and defense on the prohibited sectors list or provide details on casinos and hotels. By excluding some sub-sectors this index apparently goes one step further into the sectoral classification. They add to the exclusion other business such as cloning, advertising of activities or products that don't adhere to Islamic principles and trading of gold and silver and cash on deferred basis because they can be only traded at spot in Sharīʻah.
FTSE (UK)	1. Conventional finance 2. Alcohol 3. Pork related products and non-halal food production, packaging and processing or any other activity related to pork and non-halal food 4. Entertainment (casinos, gambling and pornography) 5. Tobacco 6. Weapons and defense manufacturing.	The index does not provide details on hotels, entertainment activities such as cinema and music production and distribution.

AL-Rayan (Qatar)	1. Conventional Financial Services 2. Alcohol 3. Pork Related Products 4. Adult Entertainment 5. Tobacco 6. Weapons 7. Gambling/Casinos 8. Music 9. Hotels (except Sharīʻah-compliant hotels) 10. Cinema	The index listed some sectors like gambling and adult entertainment although they don't operate officially in the country and there are no listed companies in the Qatar Stock Exchange except for one cinema company.
Meezan (Pakistan)	1. Conventional banking and insurance 2. Alcoholic drinks 3. Pork production 4. Pornography or related activities 5. Tobacco 6. Arms manufacturing.	The index does not provide details on hotels, entertainment activities such as cinema and music production and distribution.
Bursa Malaysia (Malaysia)	1. The primary activity of the company must not be against the Sharīʻah principles. This will be analyzed using four primary criteria. *Ribā*, *Gharar*, sale of prohibited goods and services such as pork and alcohol and gambling. Also, the haram element must be very small compared to the main activities. 2. Public perception or image of the company's activities from the perspective of Islam must be good. 3. The core activities of the company are important and considered *Maṣlaḥah* (benefit) to the Muslim nation and the country, and non-permissible element is very small and involves matters such as *Umum balwa* عموم البلوى, *Urf العرف* (custom) and the rights of the non-Muslim community which are accepted by Islam (Zainudin, Miskam & Sulaiman, 2014, p. 82).	No formal list that includes prohibited sectors and there are no details about entertainment activities and weapons manufacturing in the screening. The qualitative screening in Bursa Malaysia gives a special attention to the image of the company and the benefit it brings to the Muslim community from its business activities. However, the screening does not include details of how this will be measured as the image does not have a particular benchmark and its resolution is based on the discretion of the SAC.

Table 3.1 shows that there is a consensus among all the selected indices about the exclusion of companies with conventional finance, alcohol, pork, pornography or tobacco as a core business activity. There are no major differences in the sector screening among the different Sharīʻah-compliant index providers, they all exclude companies that rely on prohibited activities for profit making. The minor differences in the sector screening can be seen in activities that are not clearly prohibited in Sharīʻah, rather the disagreement appears because the issue is about 'where' and "what for' the products will be used such as producing weapons and defense. Although two out of four Sharīʻah scholars are in the Sharīʻah supervisory board of both Dow Jones and S&P. However, Dow Jones considers weapons and defense a prohibited sector while S&P doesn't, and S&P made an exemption for Sharīʻah compliant business in the entertainment industry while Dow Jones doesn't, even though both indices are originated in the United States, which might create a confusion for the investor and raise some question marks.

The sector screening in these indices has ignored other important aspects such as if the operations of the company are friendly to the environment as the screenings don't contain any conditions related to the behavior of the company from an environmental, social and governance aspects. These are important areas of Sharīʻah concern because Islamic principles always look into the best interest of the whole community, society and all humanity. Thus, a company that is making profit through an aggressive use of the natural resources, causing pollution and damaging the environment where humans live in should be considered a company that operates against the guiding principles of Islam and should be recognized as such. Recently, many stock exchanges around the world have issued guidelines that enforce listed companies to incorporate an environmental, social and governance concerns into their annual reports such as London Stock exchange and Hong Kong Stock Exchange as a recognition of the importance of these large companies' contributions to the society and to monitor the behavior of these companies towards the surrounding environment. While Muslims have guidelines that concern the environment protection and encourage sustainability since the days of the Prophet. For instance, the prophet peace be upon him has discouraged extravagance in water resources. When one of the companions was doing ablution and the prophet said: "What is this extravagance, O Saʻd?" He said: Can there be any extravagance in ablution? He said, "Yes, even if you are on the bank of a flowing river."[11] If this is the situation for ablution, a rituals practice that is necessary for prayers, shouldn't this notion of conserving resources be practiced by us and enforced by law on companies and

[11] Reported by Abdullah ibn ʻAmr ibn Al-ʻAas. Narrated by Imam Ahmad (6768) and Ibn Maajah (419)

institutions. Sharīʻah screenings should address that and exclude companies who evidently uses natural resources in an extravagance manner or does not have a proper waste management process. Adopting these environmental, social, moral and governance standards in the Sharīʻah screening can in the long run help improve the employee's relations, encourage using renewable energy and apply appropriate waste management strategies. Recognizing that it might be difficult to apply these very important criteria at present as this may reduce the number of Sharīʻah-compliant companies, the importance of such ideas imposes itself and calls for action by Sharīʻah specialists to functionalize them. This could also encourage new businesses and startups to follow these standards at early stages of their business operations.

3.2 Quantitative Screenings (The Financial Screening)

This section will discuss the financial Sharīʻah screenings that companies who pass the sector screening will go through in the selected indices. Table 3.2 includes the screening for levels of non-permissible income while Table 3.3 covers debt level. Table 3.4 presents the screenings of assets of the company and Table 3.5 includes the liquidity screenings.

3.2.1 Screening of non-Permissible Income

This subsection will review non-permissible Income screenings used by each of the selected indices. Any company that generates income from non-permissible activities more than the tolerated level will be banned from entering the list of Sharīʻah compliant companies. The following table (Table 3.2) includes the non-permissible Income screening criteria currently used by these indices.

As shown in Table 3.2, S&P, Dow Jones, FTSE and Meezan indices have consensus on limiting non-permissible income to a maximum of 5% of revenue. In AAOIFI the 5% is counted from the total income generated by the company and these four indexes used the term revenue in same meaning as total income as the intention is to consider in the denominator income before deducting any direct or indirect expenses and charges.

For Bursa Malaysia the tolerance level is measured from the group revenue or group profit before taxation. Profit before taxation comes after detecting all expenses incurred by the company whether direct or indirect, there is a great difference between it and total revenue. This difference can affect the amount of activities that can generate non-permissible income conducted by the company, which is a serious matter that must be addressed by authorities in Bursa Malaysia.

Table 3.2:
Non-Permissible Income Screening

Index	Non-permissible Income level	Remarks
AAOIFI	Income generated from prohibited components should not exceed 5% of total income	AAOIFI provide a general statement of prohibition components without any elaboration on specific items. The remaining indices have a similar approach to AAOIFI.
DJIM (USA)	Income from prohibited activities cannot exceed 5% of revenue	
S&P (USA)	Non-Permissible Income other than Interest Income should be less than 5% of revenue	The only index that excludes interest income from non-permissible income.[12]
FTSE (UK)	Total interest and non-compliant activities income should not exceed 5% of total revenue.	
AL-Rayan (Qatar)	-	The used screening methodology does not include a limitation for non-permissible income level as Al Rayan excludes interest income from the sector screening.[13]
Meezan (Pakistan)	The ratio of non-compliant income to total revenue should be less than 5%	
Bursa Malaysia (Malaysia)	Benchmarks of Sharīʻah non-compliant activities to the group revenue or group profit before taxation of the company relative to certain business activities as follows: **The 5% benchmark** applicable to: Conventional banking; conventional insurance; gambling; liquor and liquor-related activities; pork and pork-related activities; non-halal food and beverages; Sharīʻah non-compliant entertainment; interest income from conventional accounts and instruments; tobacco	The only index that has two benchmarks for non-permissible activities. It links the level of tolerance of non-permissible income to the kind of business activity that was conducted where up to 20% can be tolerated for specific activities and 5% for others.

[12] I assumed that the index might have a 5% tolerance for interest and another 5% for other non-permissible income. However, this could not be confirmed as I tried to communicate with S&P Sharīʻah board, but there was no respond.

[13] I tried to communicate with Al Rayan Investment for justification of not using a tolerance level for interest and non-permissible income, but I didn't receive any respond.

	and tobacco-related activities and other activities deemed non-compliant according to Sharīʻah. **The 20% benchmark** applicable to: Share trading; stock-brokering business; rental received from Sharīʻah non-compliant activities and other activities deemed non-compliant according to Sharīʻah.

S&P, DJIM, Al Rayan exclude interest income from the total income for calculating the non-permissible income percentage, which is unjustified. Non-permissible income should include all types of prohibited activities and interest earning is the most significant one that should be focused on instead of excluded. Al-Rayan Islamic index in Qatar does not have any criteria that limits the level of non-permissible income as a part of total revenue. It's true that Qatar is a Muslim-majority country and it is unlikely that any of the listed companies have investment in forbidden products such as alcohol or pork, still there are other prohibited business that operates in the country like cinemas and conventional finance which mixed companies can have operations with, especially conventional finance and insurance. Bursa Malaysia has a quite unique screening method for the level of non-permissible income. It has a 5% and a 20 % tolerance benchmarks for the prohibited activities depending on the activity itself. The index does not provide any details for the selection of these benchmarks nor why they are used for these businesses in particular.

3.2.2 Screening of Debt (Leverage) Ratio

Table 3.3 below shows debt ratio screenings currently used by the indices. Any company that exceeds the allowed tolerance level of conventional debt will be eliminated from the list of Sharīʻah-compliant companies that can be included in the Sharīʻah index.

The Rationale for using a leverage ratio is that if a company finances more than one third of its assets or commercial transactions with interest-based debt then subsequently these assets and any revenue generated from them is not Halal because the source used to acquire them is not Halal. Muslim investors holding this company shares will become a partial owner of a non-Sharīʻah-compliant asset as more than the tolerated level of interest-based debt has been used by the company. As can be seen from Table 3.3, Meezan leverage screening is the most tolerant in this list of indices, it has a tolerance level of 37% of debt as a ratio of total asset. This is unexpected considering that Pakistan is a Muslim majority country that has full access to Islamic finance services compared to other western indices. However, it must be noted that the percentage was earlier 40 and recently reduced to 37%. The remaining indices have a tolerance level that ranges between 30% and 33%, which apparently reflects what each index considers the one third to distinguish between what is few and what is many.

Table 3.3:
Debt (Leverage) Ratio Screening

Index	Debt (leverage) level	Remarks
AAOIFI	$\frac{\text{Total Debt}}{\text{Market capitalization}}$ **< 30%**	• The different views of determining the third is evident in the tolerance level for debt in all these screenings. • Difference between using total asset or market capitalization as a denominator
DJIM (USA)	$\frac{\text{Total Debt}}{\text{Average Market Capitalization (24 month average)}}$ **<33%**	
S&P (USA)	$\frac{\text{Debt}}{\text{Market Value of Equity (36 month average)}}$ **< 33%**	
FTSE (UK)	$\frac{\text{Debt}}{\text{Total Assets}}$ **< 33.333%**	
AL-Rayan (Qatar)	$\frac{\text{Total Debt}}{\text{Total Assets}}$ **< 33.33%**	
Meezan (Pakistan)	$\frac{\text{Debt}}{\text{Total assets}}$ **< 37%**	
Bursa Malaysia (Malaysia)	$\frac{\text{Debt}}{\text{Total assets}}$ **< 33%**	

3.2.3 Screening of Asset Use

The asset use screening surveys the assets side of the balance sheet in each company to check what is the percentage of non-permissible assets owned by the company, mainly interest earning assets. If the company owns interest generating assets beyond the tolerated level it will be excluded from the list of Sharīʻah-compliant companies that can be included in the index. Asset use screenings for the selected indices are listed in Table 3.4 below.

In terms of assets, it is not permissible for a Muslim to purchase or hold an interest-earning asset such as deposits in conventional banks or bonds. Accordingly, a company that has interest-earning assets forming more than one third of its total assets or market value will not be included in the Sharīʻah index and holding the shares of such a company will be considered a sinful act because the company relies to a great degree on interest-earning elements. As can be seen from the table, Dow Jones, S&P, FTSE and AL-Rayan agreed on examining cash and interest-bearing securities in this screening as a part of total assets or marker capitalization. AAOIFI screening only mentioned interest earning deposits and does not include any details about other interest-earning elements such as bonds or treasury bills, which should be addressed and explained by AAOIFI. Bursa Malaysia doesn't have a screening for interest-earning assets relative to the company's total assets or market capitalization like the other indices. This is a serious issue that should be addressed because if more than one third of the company's assets are interest-earning then the investor would be a partial owner in a non-Sharīʻah compliant company.

Table 3.4:
Asset Use Screening

Index	Interest Earning Assets level	Remarks
AAOIFI	$\frac{\text{Total interest taking deposits}}{\text{Market capitalization}} < 30\%$	Does not include interest-bearing securities
DJIM (USA)	$\frac{\text{Cash \& interest bearing securities}}{\text{Average market capitalization (24 month average)}} < 33\%$	
S&P (USA)	$\frac{\text{Cash + Interest Bearing Securities}}{\text{Market value of Equity (36 month average)}} < 33\%$	
FTSE (UK)	$\frac{\text{Cash \& interest bearing items}}{\text{Total Assets}} < 33.333\%$	
AL-Rayan (Qatar)	$\frac{\text{Cash \& interest bearing securities}}{\text{Total Assets}} < 33.33\%$	
Meezan (Pakistan)	$\frac{\text{Non−compliant investments}}{\text{Total Assets}} < 33\%$	
Bursa Malaysia (Malaysia)	-	The used screening methodology does not include a screening for interest-earning items as a part of total assets.

3.2.4 Screening of Liquidity Level

Liquidity level screenings that are used by the indices to classify companies as Sharīʻah compliant or not are discussed in this subsection. Table 3.5 includes the used screening by each index and it is followed by a critical review of the liquidity screening and a clarification of the objective behind it.

Here clearly, there seems to be no specific common rule behind the screening of liquidity ratio.

The liquidity level should be used to examine two different angles. The first is related to cash and short-term quasi-cash investments that earn interest, if these were more than one third of total assets then the company will not be Sharīʻah compliant because a large portion of its assets is interest generating. The second angle is concerned with the fact that in Sharīʻah cash and debts assets can only be exchanged at face value. Therefore, if the company's major assets composition consists of cash and debt then it can't be traded at a market price and it should be traded only at face value following the rules of *Ṣarf* and *Ḥawālah*. This second consideration has been addressed and clarified by OIC Fiqh Academy resolution in 2013[14]. The application of liquidity ratio in five out of seven of these indices do not follow the decision of OIC Fiqh Academy which states that if a company is traded as an institution that includes its legal entity, all assets and all liabilities, it may be traded at market price without looking into the kinds or sizes of any specific asset category whether cash or account receivables. This is because the entity is what is been traded and its assets and liabilities are subordinates (*Tabi'* تابع). Shares of a company represent the entity along with its assets and liabilities. Therefore, there is no need to apply the rules of *Ṣarf* or *Ḥawālah* because whatever cash or accounts receivable the company may have will be considered subordinates to its legal entity. Meezan and AAOIFI seems to be consistent with this. There are some other indices that are not included in the present study that do not have any screening criteria for liquidity structure of the company like Edbiz NASDAQ-100 Sharīʻah Index in the United States and Jakarta Islamic Index in Indonesia (Nasdaq OMX Group, 2012), (Indonesia Financial Services Authority, 2012).

There is a vital need to rewrite the liquidity screening threshold in a neat and precise manner. Account receivables should not be included in the Sharīʻah screening criteria unless there is a visible evidence that they included charged interest, and if they include interest they should be accounted in the use of asset screening not the

[14] Retrieved on October 29 from http://www.iifa-aifi.org/2348.html

liquidity screening. Islamic banks’ nature of business is mainly about dealing with cash and account receivables and they are Sharīʻah compliant companies but definitely have more than 33% of cash and receivables from the financing assets the bank provides as part of their total assets or market capitalization. Hence, they won't pass the screening criteria that are used to classify companies as Sharīʻah compliant.

Table 3.5:
Liquidity Level Screening

Index	**Liquidity Level**	**Remarks**
AAOIFI	-	No specific screening, only a note that the total of assets, rights and benefits of a company should not be less than one third of total assets[15].
DJIM (USA)	$\frac{\text{Accounts receivablels}}{\text{Average Market Capitalization (24 month average)}} < \mathbf{33\%}$	
S&P (USA)	$\frac{\text{Accounts Receivables}}{\text{Market value of Equity (36 month average)}<} \mathbf{49\%}$	
FTSE (UK)	$\frac{\text{Accounts receivables \& cash}}{\text{Total Assets}} < \mathbf{50\%}$	
AL-Rayan (Qatar)	$\frac{\text{Accounts receivables \& cash}}{\text{Total Assets}} < \mathbf{33.33\%}$	
Meezan (Pakistan)	• $\frac{\text{Illiquid assets}}{\text{Total Assets}} \geq \mathbf{25\%}$ •The market price per share should be ≥ the net liquid assets per share, calculated as: $\frac{\text{Total Assets} - \text{Illiquid Assets} - \text{Long Term Liabilities} - \text{Curren}}{\text{Number of shares}}$	
Bursa Malaysia (Malaysia)	$\frac{\text{Cash}}{\text{Total Assets}} < \mathbf{33\%}$	

3.3 Implications of The Variation Among Islamic Indices Methodologies on Islamic Equity and The Muslim Investor

[15] AAOIFI Sharīʻah Standard No. (21), P.567 (3/19)

There are several issues that results from the disagreement on using a unified denominator in the financial screening process. These issues have a direct effect on the investor and an effect on the credibility of Islamic equities. A study that was conducted by (Ashraf, Felixson, Khawaja, & Hussain) in 2017 compared the performance of Islamic equity portfolios according to different indices that use total assets and market value of equity as the denominator in the quantitative screening. The findings of the study shows that the performance of the portfolio depends largely on the screening standard that is used by the index and that varying screenings have an impact on the risk and return of the portfolio. This study has emphasized the results of a preceding study by (Ashraf, 2016, p. 210) which showed that the choice of the denominator has an impact on the returns of portfolio. Since the existing differences in the screening criteria have an impact on the portfolio performance there is a need to unify the screening standards used, by either using market value of equity or total assets as a denominator to avoid injustice to Muslim investors by offering some a better selection of risk and reward than others. Another study finds that indices that use market capitalization as a denominator provide more Halal assets universe to Muslim investors than indices that use total assets in the financial screening process (Derigs & Marzban, 2008, p. 295).[16] The study also argued that the difference in using the financial screening denominator is a main reason behind defining some assets as Sharīʿah compliant by one index and at the same time not-compliant by another, which might create a confusion for Investors (p. 298).

4. Zero-Tolerance Islamic Equity Index for Qatar Stock Exchange

Surveying these indices and the different Sharīʿah screening methodologies they used indicate that there is a need to address the level of tolerance. The level of tolerance should be associated with the freedom of choice offered to Muslim investors in comparison with conventional investors to whom the available basket consists of all the listed shares as represented by the conventional indices. That is, to relax the Haram to an extent that ensures that Muslim investors will enjoy a level of freedom close to that enjoyed by conventional investors in building and diversifying their own investment portfolio, keeping in mind that no investor, whether individual or institutional positively participate in owning shares in all listed companies and the index is just an indicator of the share prices' behavior in the market. An adequate level of tolerance would then be that which gives the Muslim investors sufficient choice of shares in different sectors in a given market. **This can be expressed, in terms of indices by an index that would have a shape, over time, similar to the**

[16] This conclusion may be disputed as when markets are in an uptrend, market capitalization as the denominator will capture a larger universe and when the markets are in retreat the opposite holds true. (thanks to un-named referee)

shape of the conventional index of that same market. For indices to have similar behavior over a period of time it means that the total of their respective components have similar risks, similar profitability and similar diversification.

This depends on the equity market environment including place and time, number of listed companies, availability of efficient Islamic finance services and the composition of the stock market among other things. By nature, these factors are changeable. For instance, the accessibility to Islamic finance services and products is by far greater now compared to 20 years ago. This requires a periodic revision and assessment of the market situation by Sharīʻah scholars and investment experts to decide on the tolerance level that is needed for each market and each period of time.

If there exists a number of fully Sharīʻah-compliant companies, diversified in different sectors of a given market and of different sizes and performances in a way that would not put any disadvantageous opportunities to Muslim investors, then no tolerance of Haram will be deemed necessary because the reason for it is no more existing in such a market.

This section will try to examine whether an index with zero tolerance to non-permissible activities for the Qatar Stock Exchange would have these characteristics. An Islamic index with no-tolerance will be constructed using the Qatar stock Exchange (QSE) as a main source of data and comparing it with Qatar Al Rayan Islamic Index (QRII) that already exists in QSE since 2013, as well as with QSE Index (QSEI).

4.1 Suggested Criteria and Calculation Method

The criterion for the proposed index is that the company must run on a fully Sharīʻah compliant grounds by declaring itself to be committed to Sharīʻah principles in its transactions in the articles of association of the company or by having either a Sharīʻah board or a Sharīʻah audit that reviews the company's transactions on a periodic basis. It was found that 18 companies currently listed in QSE meet this criterion. Table 4.1 provides a list of companies that meet the criterion of the Qatar Zero-Tolerance Index (QZTI) in QSE and the sectors in which they are classified under.

Table 4.1:
List of Companies in QZTI

	Company	Sector	Stock Ticker
1.	Qatar Islamic Bank	Banks & Financial Services	QIBK
2.	Qatar International Islamic Bank		QIIK
3.	Masraf Alrayan		MARK
4.	Qatar First Investment Bank		QFBQ
5.	Islamic Holding Group		IHGS
6.	National Leasing Holding		NLCS
7.	Qatar Islamic Insurance	Insurance	QISI
8.	Al Khaleej Takaful Group		AKHI
9.	Qatari Investors Group	Industrials	QIGD
10.	Gulf Warehousing	Transportation	GWCS
11.	Barwa Real Estate	Real estate	BRES
12.	Ezdan Holding Group		ERES
13.	Mazaya Qatar Real Estate Development		MRDS
14.	Vodafone Qatar [17]	Telecoms	VFQS
15.	Widam Food	Consumer Goods & Services	WDAM
16.	Al Meera Consumer Goods		MERS
17.	Medicare Group		MCGS
18.	Zad Holding		ZHCD

We see from Table 4.1 that there is at least one Sharīʻah-compliant company in each sector of the sectors that operate in QSE. Companies that run on Sharīʻah-compliant basis are concentrated in banking and financial services sector, real estate sector and consumer goods and services sector. All companies in this list are also included in the most recent list of companies that are not subject to purification as published by Ali Al-Quradaghi.[18]

The calculation of the index daily value is done according to the price return index formula that is used by both QSEI and QRII.

Index calculation formula: $\frac{\left[\sum_{i=1}^{N} Pi,t*Qi,t*Ci,t\right]}{Divisor\ t}$

Where: t day of calculation

N number of the constituents in the index

[17] Vodafone Qatar became fully Sharīʻah compliant since 2015.
[18] Retrieved on March 10 from http://www.qaradaghi.com/Details.aspx?ID=3651.

i vary between 1 and N

$P_{i,t}$ closing price of the constituent i at day t

$Q_{i,t}$ number of free-float shares of the constituent i at day t

$C_{i,t}$ capping factor of the constituent i at day t[19] (only applied to companies whose weight exceed 15%)

The indices calculation in Qatar is based on free float market capitalization divided by a divisor.[20] The divisor was first determined on the index base capitalization and the base level and updated whenever there is a corporate action or composition change in the index constituents ("Qatar Stock Exchange", 2013).[21] To ensure a proper comparison, the calculation of QZTI will also be based on free float market capitalization as well.

4.2 Differences Between the Proposed Index and Al Rayan Islamic Index

Table 4.2 below presents the list of companies in Al Rayan Islamic index and the sectors in which they operate in the Qatari market as published on March 2018 ("Qatar Stock Exchange", 2018)[22].

Comparing Table 4.2 with Table 4.1 shows that there are 13 common companies and only 5 are different between QZTI and QRII. Four of these five companies are in the industrials sector. This does not seem to offer much diversification opportunity, it actually makes QRII more concentrated and QZTI more diversified. Five out of the eighteen listed companies under QRII are subject to purification while naturally, companies in QZTI do not need any purification.

QRII does not have a capping factor on market capitalization similar to the cap in the QSEI, rather it has customized weights assigned to its constituents. The QRII methodology states that the number of index constituents is not fixed. However, its customized weighing scheme seems to limit the number of constituents that can be listed under it The QRII drops any share with less than 0.5% free float market capitalization from its list which resulted in removing five Sharīʻah-compliant companies which exist in the QZTI.

[19] Al Rayan price index formula doesn't have a capping factor

[20] Free float capitalization is based on free float shares which are the shares that can be actually traded at the market; this excludes shares owned by the government and board members.

[21] Retrieved February 10, 2018 from https://www.qe.com.qa/

[22] Retrieved March 01, 2018, from https://www.qe.com.qa/qe-indices

The proposed QZTI will not have a customized weighting scheme, rather it will assign a capping factor of 15% similar to QSEI. Still, the values of QZTI without capping will also be calculated for comparison purpose.

Table 4.2:
List of companies in Qatar Al Rayan Islamic index

	Company	Sector	Stock Ticker	Assigned Weight	Purification
1	Qatar Islamic Bank	Banks & Financial Services	QIBK	7.64%	-
2	Qatar Intern Islamic Bank		QIIK	8.43%	-
3	Masraf Alrayan		MARK	14.57%	-
4	Qatar First Investment Bank		QFBQ	2.23%	-
5	Qatar Islamic Insurance	Insurance	QISI	0.96%	-
6	Aamal Company	Industrials	AHCS	5.21%	Subject to purification
7	Industries Qatar		IQCD	13.08%	Subject to purification
8	Qatar Industrial Manufacturing		QIMD	1.06%	Subject to purification
9	Qatari Investors Group		QIGD	4.19%	-
10	Qatar National Cement		QNCD	4.52%	Subject to purification
11	Gulf Warehousing	Transportation	GWCS	4.55%	-
12	Mazaya Real Est. Dev.	Real estate	MRDS	1.89%	-
13	Barwa Real Estate		BRES	10.18%	-
14	United Dev. Company		UDCD	5.33%	Subject to purification
15	Vodafone Qatar	Telecoms	VFQS	5.03%	-
16	Al Meera Consumer Goods	Consumer Goods & Services	MERS	4.98%	-
17	Widam Food		WDAM	0.92%	-
18	Medicare Group		MCGS	5.23%	-

4.3 Comparing QZTI Behavior with QSEI and QRII

This section makes a comparison between the index level of QZTI with QSEI and QRII on a monthly basis. The results of this comparison should indicate whether there is similarity in the behavior of these three indices. Table 4.3 in the appendix shows an example of the calculation of QZTI values for the first three months of the examined period (2013-2017) without capping, while Tables 4.4 and 4.5 shows the calculation of QZTI values in the same period using the capping factor. Recent divisors used by both Al Rayan Islamic index and QSE general index are used in calculating the index values for comparative reasons.[23]

For further illustration and to see if there are any significant differences between QZTI and QRII another index consisting of the thirteen common companies is also created. The calculation of the common companies' index is based on free float market capitalization and it is done with and without capping as well to ensure a proper comparison with the other two indices. Table 4.6 in the appendix shows an example of the calculation of the common companies' index in the same period.

The following pages includes 4 charts that give a graphical illustration of the calculated values of QZTI and common companies index along with the historical values of QRII and QSEI for the examined period. Figure1 presents the calculated monthly values of the capped and un-capped QZTI along with QRII and QSEI, using Al Rayan Islamic index divisor. While Figure 2 represents the monthly values that were calculated for QZTI using QSEI divisor. Figure 3 and Figure 4 graphically illustrate the values of QRII, QZTI and the index of common companies between on a monthly basis using Al Rayan Islamic index divisor and QSE General index divisor respectively. The calculated values of QZTI and the common companies index along with historical indices values of QRII and QSEI that are used in the charts are available in tables 4.7 ,4.8 and 4.9 in the appendix.

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[23] It was not possible to get historical values of the divisor used by QRII and QSEI. Officials were contacted for this research and informed us that these data is "not available".

Figure-1:
QZTI capped and un-capped Index values using Al Rayan divisor, Compared with QE and Al Rayan Index

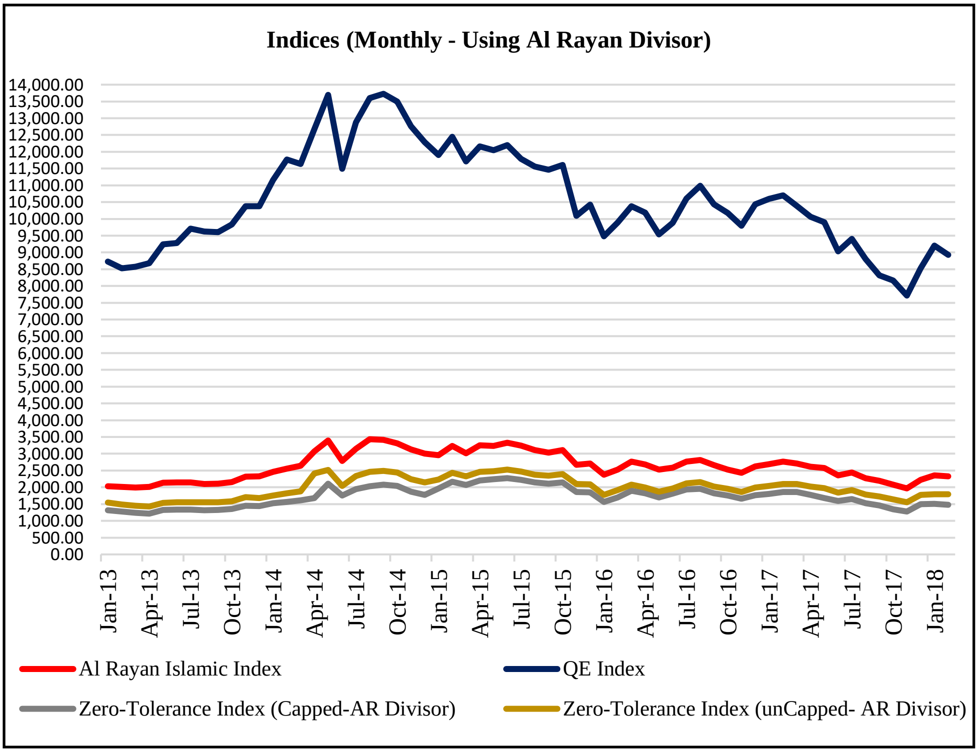
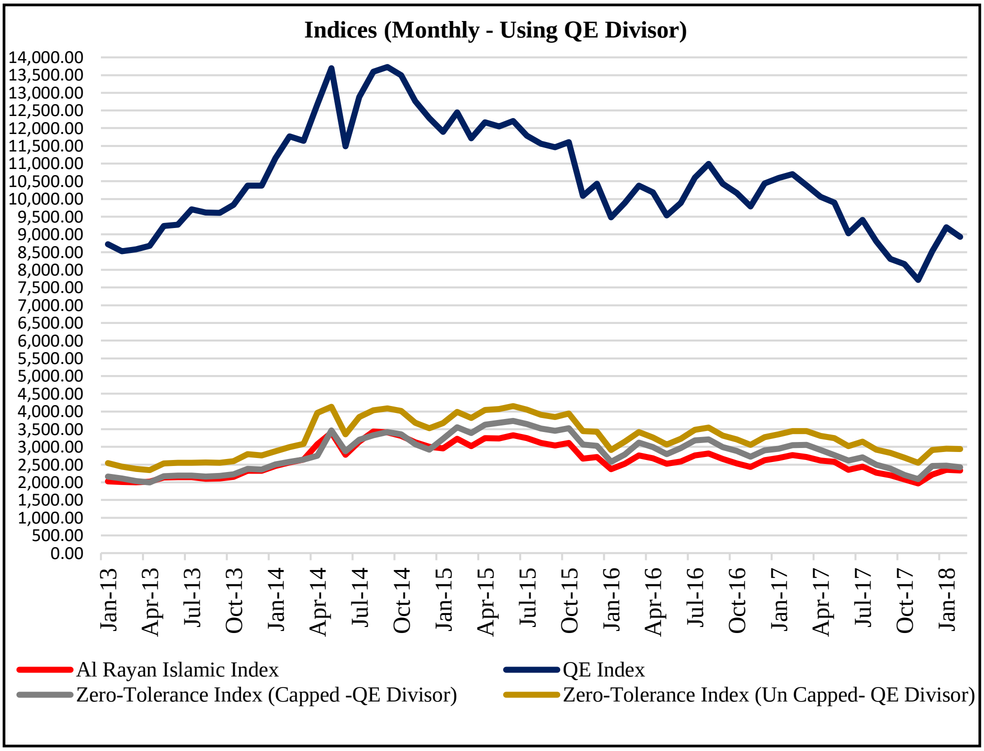


Figure-2:
QZTI capped and un-capped Index values using QE divisor, Compared with QE and Al Rayan Index



Figures 1 and 2 shows that the shape of QZTI and QRII curves are almost identical, which indicate that QZTI gives as good information as QRII. In figure 1 the values of QRII are higher than the values of both QZTI indexes. This is because the market capitalization of the companies included in QRII are much larger than either of QZTI, or the Index of the 13 common companies. Also, the value of the index differs according to the used divisor. Note that the value of the QZTI is larger when using QSEI divisor since the latter is smaller than Al Rayan divisor. Further, it is seen from the two figures that the difference that appears from using two different divisors has little effect on the general shape of the indices' curves.

There is strong similarity in the upward and downward movement in the studied period among all 4 indices, except that they are much sharper in QSEI, which may indicate that Islamic indices are more stable with less fluctuation and volatility. These charts show that on a monthly basis comparison of indices' behaviors, there are no significant differences between Al Rayan Islamic Index and QZTI, especially the un-capped QZTI.

Figure 3 and Figure 4 show that there are no significant differences between al Rayan Islamic index and the indices that consist of fully Sharī'ah compliant companies except in their values. This is evident when comparing QRII and the index of common companies between QRII and QZTI, which indicates that the five companies that are included in Al Rayan do not have any substantial effect on the shape of QRII. The similarity in the behavior of Islamic indices is much clear in this comparison, as all Islamic indices look as if they have copied each other in terms of behavior and changes. This confirms what was seen in the previous charts that there are no significant differences between QRII and QZTI in the Qatari Stock Market and the only difference between them is the size of their values. Overall, the charts show that whether the index was capped or not and whether we use Al Rayan divisor or QSE divisor, the Islamic indices behave in a similar manner.

Figure-3:
Common Companies Index capped and un-capped values compared with QZTI index, using Al Rayan divisor, Compared with Al Rayan Index

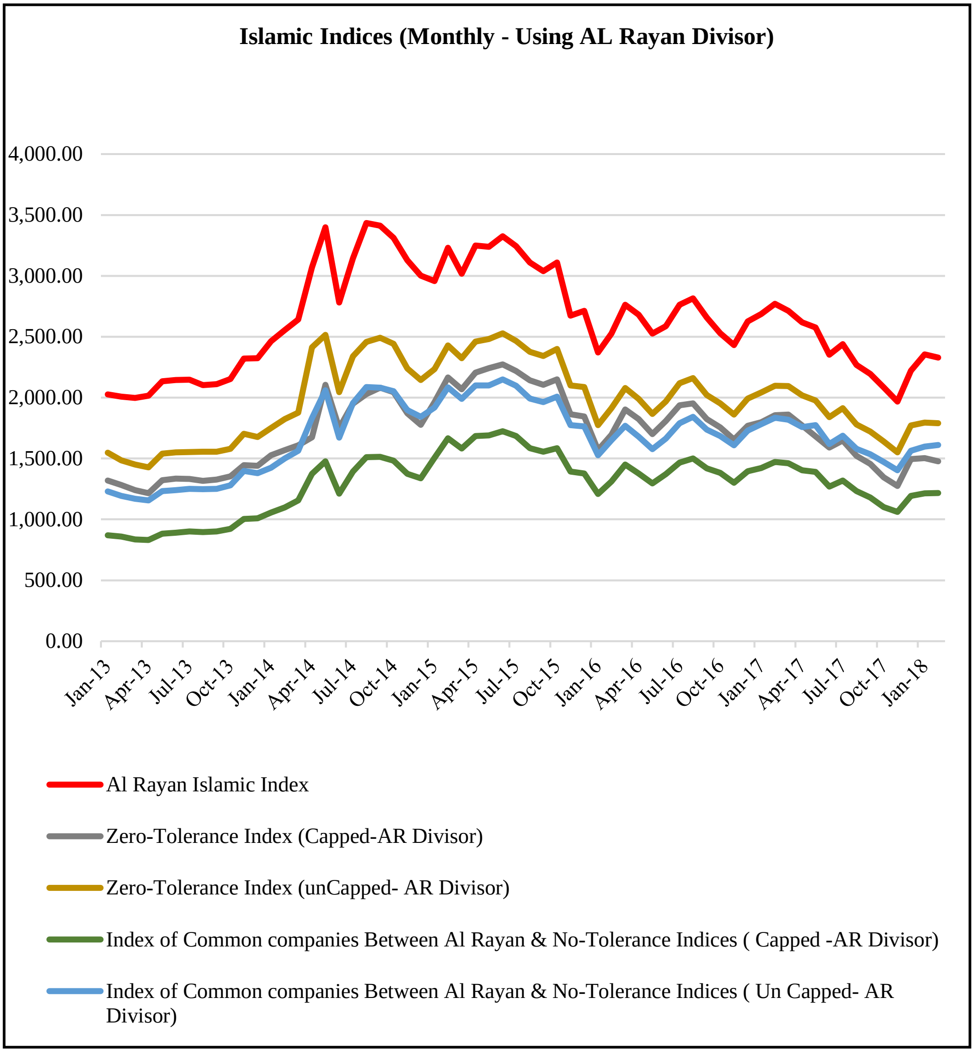
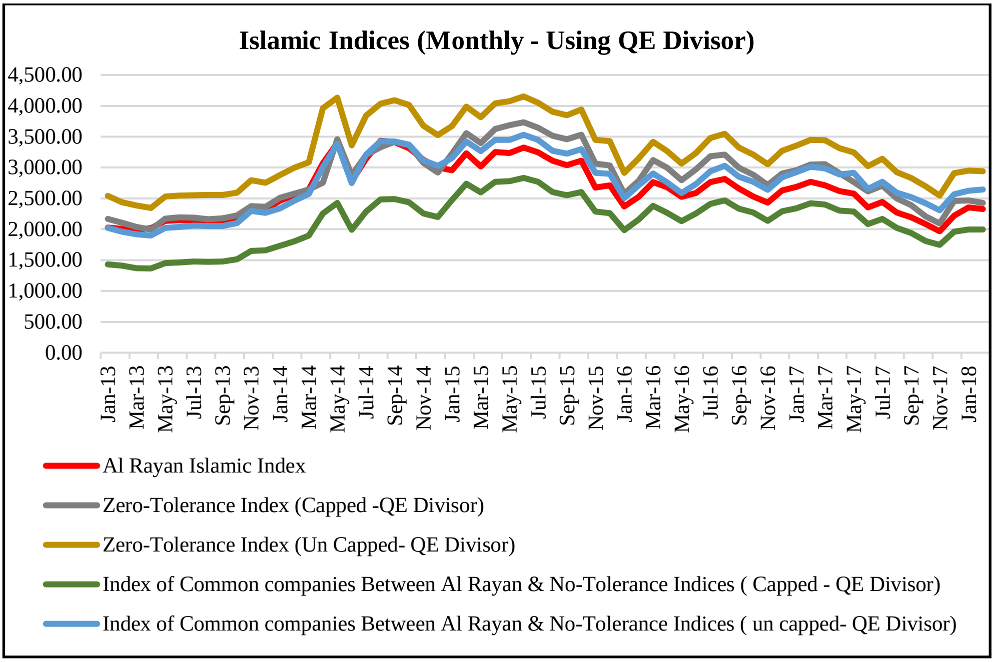


Figure-4:
Common Companies Index capped and un-capped values compared with QZTI index, using QE divisor, Compared with Al Rayan Index



5. Conclusion and Recommendations

Although the creation of the first Islamic index was less than twenty years ago, Islamic indices and Sharīʿah screenings have been and still are taking a significant attention from researchers.

This paper attempted to identify the rationale behind choosing a specific level of tolerance to non-permissible activities and the financial screenings methods to apply it for creating indices. It surveyed several Islamic indices developed in different countries to identify and analyze the differences and similarities between them. An Islamic index with zero tolerance to non-permissible transactions, activities and income was developed to see if it is about time to have a fully Sharīʿah-compliant index that is not handicapped by any disadvantages to Muslim investors.

Findings suggest that there are several differences among Sharīʿah screening methods and that some indices did not include in their screenings some important criteria, a matter that must be addressed and revised. The results of the conducted tests as can be seen from the above figures, though with different values, show high similarity in the shape of the three indices. The similarity is more oblivious between QRII and QZTI, which indicates that there is no Sharīʿah justification for the tolerance level adopted by QRII and the index without tolerance behave in the same way in the stock market. It is known that a normal investor holds an average of 15 companies' shares in its stock portfolio, the fully Sharīʿah-compliant companies can fulfill this requirement as they are 18 companies currently and they are distributed among the different sectors of the Qatar market. Therefore, since the behavior of the companies' stock indices is similar, the number of listed companies is also the same (18 each) and the QZTI meets the requirement of a normal investor, there is no rational justification to deviate from zero-tolerance level as done by Al Rayan Islamic index. This suggests that the trading options available to those who will follow the tolerating QRII and those who will only invest in fully Sharīʿah-compliant companies are about the same. This suggests that the tolerance level mentioned in the AAOIFI Standard 21 is not necessary in some equity markets without any negative effect on the investments opportunities available to Muslims or on the effectiveness and indicative data given in the index. If this zero tolerance Islamic index was created in Qatar stock exchange, it would be the first of its kind, which might encourage other countries to assess their market situation and see whether they have reached a level where they don't need to tolerate any non-permissible activities or income or at least can minimize it.

When comparing the QZTI to Qatar General Index, we notice that they somewhat behave also in the same way in the stock market although QSEI is sharper in its upward and downward sloping. The only thing that might put conventional investors on a better ground than a Muslim investor is that a wider range of stocks is available to them, while the Muslim investor will select his investment from a partial basket of the listed companies. The difference is being eliminated with time as more companies are converting to following Sharīʿah rules and guidelines. This puts QRII in troubled waters as it did not include 5 companies that are fully Sharīʿah compliant, which could have made the Islamic basket of stocks in the country richer as it would consist of 23 Sharīʿah-compliant stocks.

Recommendations

Al Rayan Index should increase the number of constituents that could be included in the index by narrowing down the customized weights that are applied in Al Rayan Islamic index since its establishment in 2013 until the day this research was being undertaken. It is a fact that the Islamic index acts as an indicator of the market performance similar to any other index in the stock market, which might rationalize the conditions that are set to define eligible stocks to enter the Islamic index. Still, the index is called an Islamic index and since the equity market is not wholly Islamic, the investor understands that the index value represents only the performance of companies that passed the Sharīʻah screening in a certain market. Therefore, some flexibility may be required to ensure that all fully Sharīʻah compliant companies are included in the Islamic index of the market along with companies with mixed activities. A matter which will definitely give the investor more freedom of choice due to the larger range of selection and an ability to diversify one's stock portfolio. Unless there is a need to include mixed campiness for purposes like diversification between the different sectors and giving Muslim investors a comparably adequate range of selection for investment. Otherwise, the criteria related to share velocity and minimum weight of market capitalization should have a secondary priority and the Sharīʻah status of the company should come first.

In QZTI, some sectors like the industrial sector have only one fully Sharīʻah compliant company listed under it. Muslim investors who choose to include only fully Sharīʻah compliant stock in their portfolios might face challenges due to the limited scope of choice in this sector and others, this should be addressed by index officials.

Islamic index developers and Sharīʻah boards should agree on unifying the financial screening methods they use. This will ensure consistency and comparability among Islamic indices and boost the confidence in Islamic finance products and services in the capital market.

The level of tolerance should not be the same for all countries (some writers also suggest not being the same across industries) and should be determined according to the need of the country in which the Islamic index is developed. Also, the economic magnitudes of the country should be revised and the listed companies reviewed periodically to decide what tolerance level is suitable for its equity market keeping in mind that the principle is to avoid any Haram activities and income as mentioned in the OIC Fiqh Academy.

Finally, the Islamic sector screening should introduce additional criteria that examine the behavior of the company from an environmental, social and governance aspects. These are extremely important to judge the level of commitment of a company to abide by Sharīʻah because Sharīʻah principles discourage behaviors that negatively affect, and assuredly prohibit inflicting harm to, the community, society, environment and all humanity and other living creatures at large.

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Appendix

Table-4.3:
Qatar Zero-Tolerance Index, QZTI (Without Capping)[24]

	Companies	Jan-13	Feb-13	Mar-13
	Free-Float Market Capitalization = (Free-Float Shares* Closing Price)			
1	QIB	13,303,312,306.74	12,871,269,339.50	12,763,259,047.74
2	QIIB	5,776,627,347.74	5,870,471,158.13	5,432,531,812.26
3	MARK	16,778,031,508.89	15,685,509,785.19	16,095,205,269.00
4	QFB [25]	-	-	-
5	NLCS	1,867,760,547.26	1,649,390,492.00	1,635,452,027.26
6	IHG	73,346,747.43	72,917,888.16	68,628,553.05
7	ZAD	796,637,067.36	779,631,626.64	814,950,523.32
8	WDAM	989,841,879.00	1,071,059,657.28	1,115,052,680.44
9	MERS	1,961,966,896.00	2,092,276,549.75	1,903,400,720.00
10	QIGD	2,250,749,825.52	2,114,798,493.78	2,187,305,770.00
11	AKHI	565,471,917.99	575,370,084.67	558,295,203.29
12	QISI	715,648,512.40	707,143,339.95	626,951,792.10
13	BRES	10,796,065,115.65	10,368,883,444.35	9,650,439,848.00
14	ERES	10,837,485,887.95	9,997,276,869.52	9,498,021,873.60
15	MRDS	926,301,107.91	1,011,286,046.90	918,653,279.93
16	GWC	740,668,394.74	764,784,071.93	784,420,397.72
17	MCGS	788,007,088.92	776,877,045.92	816,945,178.46
18	VFQS	-	-	-
Total Free-Float Market Cap		69,167,922,151.51	66,408,945,893.67	64,869,513,976.17
Index Value: = (Total Free-Float Market Cap/ Divisor)				
Al Rayan Divisor[26]		44,710,248.85	44,710,248.85	44,710,248.85
QZTI Value		1,547.03	1,485.32	1,450.89
QE Divisor		27,222,940.59	27,222,940.59	27,222,940.59
QZTI Value		2,540.80	2,439.45	2,382.90

[24] This three-month example is given in order to show the methodology and the calculation.
[25] Qatar First Bank was listed on June 2016.
[26] Because I was not able to obtain any basis for calculating the Zero-tolerance index own divisor and there are no information available that explains the calculation method of the divisor used by Al Rayan or QE, I used both divisors with the hope of making it closer to reality as it should contain relating numbers to base year in addition to other factors that are used for calculating the divisor and to see how can using different divisors affect the index.

Table-4.4:
Applying 15% Cap on Companies of QZTI

	Companies	Jan-13		Feb-13		Mar-13	
		Weights before capping	Weights after capping	Weights before capping	Weights after capping	Weights before capping	Weights after capping
1	QIB	19.23%[27]	15.00%	19.38%	15.00%	19.68%	15.00%
2	QIIB	8.35%	8.35%	8.84%	8.84%	8.37%	8.37%
3	MARK	24.26%	15.00%	23.62%	15.00%	24.81%	15.00%
4	QFB	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
5	NLCS	2.70%	2.70%	2.48%	2.48%	2.52%	2.52%
6	IHG	0.11%	0.11%	0.11%	0.11%	0.11%	0.11%
7	ZAD	1.15%	1.15%	1.17%	1.17%	1.26%	1.26%
8	WDAM	1.43%	1.43%	1.61%	1.61%	1.72%	1.72%
9	MERS	2.84%	2.84%	3.15%	3.15%	2.93%	2.93%
10	QIGD	3.25%	3.25%	3.18%	3.18%	3.37%	3.37%
11	AKHI	0.82%	0.82%	0.87%	0.87%	0.86%	0.86%
12	QISI	1.03%	1.03%	1.06%	1.06%	0.97%	0.97%
13	BRES	15.61%	15.00%	15.61%	15.00%	14.88%	14.88%
14	ERES	15.67%	15.00%	15.05%	15.00%	14.64%	14.64%
15	MRDS	1.34%	1.34%	1.52%	1.52%	1.42%	1.42%
16	GWC	1.07%	1.07%	1.15%	1.15%	1.21%	1.21%
17	MCGS	1.14%	1.14%	1.17%	1.17%	1.26%	1.26%
18	VFQS	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	Total	100.00%	85.23%	100.00%	86.33%	100.00%	85.51%

Table-4.5:
Free- Float Market Capitalization of the QZTI after capping factor

	Companies	Jan-13	Feb-13	Mar-13
1	QIB	10,375,188,322.73	9,961,341,884.05	9,730,427,096.43
2	QIIB	5,776,627,347.74	5,870,471,158.13	5,432,531,812.26
3	MARK	10,375,188,322.73	9,961,341,884.05	9,730,427,096.43
4	QFB	-	-	-
5	NLCS	1,867,760,547.26	1,649,390,492.00	1,635,452,027.26
6	IHG	73,346,747.43	72,917,888.16	68,628,553.05
7	ZAD	796,637,067.36	779,631,626.64	814,950,523.32
8	WDAM	989,841,879.00	1,071,059,657.28	1,115,052,680.44
9	MERS	1,961,966,896.00	2,092,276,549.75	1,903,400,720.00
10	QIGD	2,250,749,825.52	2,114,798,493.78	2,187,305,770.00
11	AKHI	565,471,917.99	575,370,084.67	558,295,203.29
12	QISI	715,648,512.40	707,143,339.95	626,951,792.10
13	BRES	10,375,188,322.73	9,961,341,884.05	9,650,439,848.00
14	ERES	10,375,188,322.73	9,961,341,884.05	9,498,021,873.60
15	MRDS	926,301,107.91	1,011,286,046.90	918,653,279.93
16	GWC	740,668,394.74	764,784,071.93	784,420,397.72
17	MCGS	788,007,088.92	776,877,045.92	816,945,178.46
18	VFQS	-	-	-
Total		58,953,780,623.18	57,331,373,991.31	55,471,903,852.29
Index Values				
Al Rayan Divisor		44710248.85	44710248.85	44710248.85
QZTI Value		1,318.57	1,282.29	1,240.70
QE Divisor		27222940.59	27222940.59	27222940.59
QZTI Value		2,165.59	2,105.99	2,037.69

[27] Red color marks the excessive contribution of a company to total market capitalization.

Table-4.6:
Common Companies Between Al Rayan & QZTI

		Jan-13	Feb-13	Mar-13
1	QIB	13,303,312,306.74	12,871,269,339.50	12,763,259,047.74
2	QIIB	5,776,627,347.74	5,870,471,158.13	5,432,531,812.26
3	MARK	16,778,031,508.89	15,685,509,785.19	16,095,205,269.00
4	QFB	-	-	-
5	WDAM	989,841,879.00	1,071,059,657.28	1,115,052,680.44
6	MERS	1,961,966,896.00	2,092,276,549.75	1,903,400,720.00
7	QIGD	2,250,749,825.52	2,114,798,493.78	2,187,305,770.00
8	QISI	715,648,512.40	707,143,339.95	626,951,792.10
9	BRES	10,796,065,115.65	10,368,883,444.35	9,650,439,848.00
10	MRDS	926,301,107.91	1,011,286,046.90	918,653,279.93
11	GWC	740,668,394.74	764,784,071.93	784,420,397.72
12	MCGS	788,007,088.92	776,877,045.92	816,945,178.46
13	VFQS	-	-	-
	Total	55,027,219,983.51	53,334,358,932.68	52,294,165,795.65
	Index Values			
	Al Rayan Divisor	44710248.85	44710248.85	44710248.85
	Common Companies Index Value	1,230.75	1,192.89	1,169.62
	QE Divisor	27222940.59	27222940.59	27222940.59
	Common Companies Index Value	2,021.35	1,959.17	1,920.96
	Weights before applying capping factor			
1	QIB	24.18%	24.13%	24.41%
2	QIIB	10.50%	11.01%	10.39%
3	MARK	30.49%	29.41%	30.78%
4	QFB	0.00%	0.00%	0.00%
5	WDAM	1.80%	2.01%	2.13%
6	MERS	3.57%	3.92%	3.64%
7	QIGD	4.09%	3.97%	4.18%
8	QISI	1.30%	1.33%	1.20%
9	BRES	19.62%	19.44%	18.45%
10	MRDS	1.68%	1.90%	1.76%
11	GWC	1.35%	1.43%	1.50%
12	MCGS	1.43%	1.46%	1.56%
13	VFQS	0.00%	0.00%	0.00%
	Total	100.00%	100.00%	100.00%
	Weights after applying capping factor			
1	QIB	15%	15%	15%
2	QIIB	10.50%	11.01%	10.39%
3	MARK	15%	15%	15%
4	QFB	0.00%	0.00%	0.00%
5	WDAM	1.80%	2.01%	2.13%
6	MERS	3.57%	3.92%	3.64%
7	QIGD	4.09%	3.97%	4.18%
8	QISI	1.30%	1.33%	1.20%
9	BRES	15%	15%	15%
10	MRDS	1.68%	1.90%	1.76%
11	GWC	1.35%	1.43%	1.50%
12	MCGS	1.43%	1.46%	1.56%

13	VFQS	0.00%	0.00%	0.00%
	Total	71%	72%	71%
	Market Capitalization after applying capping factor			
1	QIB	8,254,082,997.53	8,000,153,839.90	7,844,124,869.35
2	QIIB	5,776,627,347.74	5,870,471,158.13	5,432,531,812.26
3	MARK	8,254,082,997.53	8,000,153,839.90	7,844,124,869.35
4	QFB	-	-	-
5	WDAM	989,841,879.00	1,071,059,657.28	1,115,052,680.44
6	MERS	1,961,966,896.00	2,092,276,549.75	1,903,400,720.00
7	QIGD	2,250,749,825.52	2,114,798,493.78	2,187,305,770.00
8	QISI	715,648,512.40	707,143,339.95	626,951,792.10
9	BRES	8,254,082,997.53	8,000,153,839.90	7,844,124,869.35
10	MRDS	926,301,107.91	1,011,286,046.90	918,653,279.93
11	GWC	740,668,394.74	764,784,071.93	784,420,397.72
12	MCGS	788,007,088.92	776,877,045.92	816,945,178.46
13	VFQS	-	-	-
Total		38,912,060,044.81	38,409,157,883.35	37,317,636,238.96
Index Values				
Al Rayan Divisor		44,710,248.85	44,710,248.85	44,710,248.85
Common Companies Index Value		870.32	859.07	834.66
QE Divisor		27,222,940.59	27,222,940.59	27,222,940.59
Common Companies Index Value		1,429.38	1,410.91	1,370.82

Table-4.7:
Monthly Values of un-capped and capped QZTI index compared with QE and Al Rayan indices

Monthly Indices Values Used in Figure 1 and Figure 2						
	Using Al Rayan Divisor		Using QE Divisor			
Month	QZTI (Un-Capped)	QZTI (Capped)	QZTI (Un-Capped)	QZTI (Capped)	Al Rayan Islamic Index	QE Index
Jan-13	1,547.03	1,318.57	2,540.80	2,165.59	2,027.59	8,724.77
Feb-13	1,485.32	1,282.29	2,439.45	2,105.99	2,008.18	8,528.58
Mar-13	1,450.89	1,240.70	2,382.90	2,037.69	1,996.70	8,577.72
Apr-13	1,427.64	1,215.22	2,344.72	1,995.84	2,017.15	8,677.10
May-13	1,539.47	1,322.06	2,528.38	2,171.31	2,135.14	9,238.00
Jun-13	1,550.66	1,334.65	2,546.77	2,192.00	2,144.39	9,275.56
Jul-13	1,553.52	1,333.45	2,551.46	2,190.02	2,147.58	9,704.98
Aug-13	1,555.97	1,317.28	2,555.49	2,163.46	2,102.17	9,619.04
Sep-13	1,555.63	1,326.39	2,554.93	2,178.44	2,111.18	9,608.32
Oct-13	1,579.10	1,353.35	2,593.47	2,222.71	2,153.47	9,837.49
Nov-13	1,702.67	1,445.97	2,796.42	2,374.83	2,320.68	10,375.06
Dec-13	1,677.26	1,440.11	2,754.68	2,365.20	2,323.95	10,379.59
Jan-14	1,750.67	1,527.51	2,875.26	2,508.74	2,462.16	11,155.73
Feb-14	1,824.11	1,568.02	2,995.86	2,575.27	2,555.65	11,771.83
Mar-14	1,877.86	1,609.28	3,084.15	2,643.05	2,642.34	11,639.79
Apr-14	2,412.19	1,674.84	3,961.71	2,750.72	3,070.89	12,677.59
May-14	2,514.80	2,106.58	4,130.24	3,459.79	3,397.63	13,694.19
Jun-14	2,044.50	1,751.38	3,357.84	2,876.41	2,780.76	11,488.87
Jul-14	2,339.49	1,949.75	3,842.32	3,202.21	3,143.96	12,877.31
Aug-14	2,456.66	2,028.13	4,034.76	3,330.95	3,433.96	13,596.66

Monthly Indices Values Used in Figure 1 and Figure 2						
	Using Al Rayan Divisor		Using QE Divisor			
Sep-14	2,490.89	2,081.27	4,090.98	3,418.23	3,411.20	13,728.31
Oct-14	2,441.95	2,045.53	4,010.59	3,359.53	3,310.96	13,498.86
Nov-14	2,239.76	1,871.05	3,678.52	3,072.96	3,126.82	12,760.46
Dec-14	2,145.65	1,777.89	3,523.96	2,919.95	3,002.23	12,285.78
Jan-15	2,235.40	1,964.40	3,671.36	3,226.28	2,956.08	11,899.63
Feb-15	2,428.96	2,166.53	3,989.26	3,558.25	3,231.06	12,445.34
Mar-15	2,323.91	2,067.62	3,816.73	3,395.81	3,018.36	11,711.40
Apr-15	2,459.34	2,206.15	4,039.16	3,623.32	3,249.54	12,164.48
May-15	2,480.09	2,242.97	4,073.24	3,683.80	3,237.13	12,048.26
Jun-15	2,527.98	2,272.94	4,151.89	3,733.02	3,326.00	12,201.02
Jul-15	2,465.56	2,218.11	4,049.37	3,642.96	3,244.70	11,785.22
Aug-15	2,376.45	2,141.94	3,903.02	3,517.87	3,110.66	11,563.56
Sep-15	2,342.72	2,105.52	3,847.63	3,458.05	3,037.45	11,465.22
Oct-15	2,398.68	2,149.70	3,939.53	3,530.61	3,108.36	11,604.59
Nov-15	2,100.66	1,864.63	3,450.07	3,062.42	2,672.84	10,090.81
Dec-15	2,086.61	1,846.00	3,426.99	3,031.82	2,712.18	10,429.36
Jan-16	1,774.12	1,568.35	2,913.76	2,575.82	2,371.77	9,481.30
Feb-16	1,914.67	1,696.48	3,144.61	2,786.25	2,525.57	9,892.32
Mar-16	2,080.39	1,901.85	3,416.77	3,123.56	2,761.68	10,376.20
Apr-16	1,990.38	1,825.09	3,268.94	2,997.49	2,681.84	10,186.18
May-16	1,865.87	1,700.67	3,064.46	2,793.14	2,527.18	9,538.77
Jun-16	1,968.46	1,807.61	3,232.95	2,968.76	2,585.24	9,885.22
Jul-16	2,119.55	1,936.93	3,481.09	3,181.16	2,762.12	10,603.96
Aug-16	2,159.80	1,953.83	3,547.20	3,208.92	2,816.14	10,989.79
Sep-16	2,022.04	1,824.93	3,320.95	2,997.22	2,657.90	10,435.46
Oct-16	1,952.66	1,754.86	3,207.00	2,882.13	2,529.59	10,172.95
Nov-16	1,860.07	1,655.16	3,054.94	2,718.39	2,430.86	9,793.83
Dec-16	1,992.28	1,768.13	3,272.07	2,903.94	2,626.28	10,436.76
Jan-17	2,042.30	1,797.99	3,354.21	2,952.97	2,686.87	10,597.22
Feb-17	2,098.33	1,855.87	3,446.24	3,048.03	2,769.34	10,702.12
Mar-17	2,095.66	1,860.75	3,441.86	3,056.04	2,711.70	10,390.60
Apr-17	2,018.11	1,771.76	3,314.49	2,909.89	2,616.80	10,064.35
May-17	1,976.42	1,683.21	3,246.02	2,764.45	2,576.02	9,901.38
Jun-17	1,839.70	1,591.29	3,021.47	2,613.49	2,352.65	9,030.44
Jul-17	1,913.83	1,648.07	3,143.23	2,706.75	2,440.17	9,406.06
Aug-17	1,779.88	1,522.23	2,923.23	2,500.07	2,268.98	8,800.56
Sep-17	1,722.76	1,454.83	2,829.42	2,389.37	2,195.28	8,312.43
Oct-17	1,641.17	1,345.21	2,695.42	2,209.34	2,083.59	8,165.06
Nov-17	1,550.90	1,275.04	2,547.16	2,094.08	1,967.46	7,714.26
Dec-17	1,772.19	1,496.46	2,910.60	2,457.75	2,220.03	8,523.38
Jan-18	1,796.36	1,503.19	2,950.30	2,468.81	2,355.65	9,204.62
Feb-18	1,789.08	1,476.19	2,938.34	2,424.45	2,329.92	8,929.50

Table-4.8:
Values of un-capped and capped QZTI index and Common Companies Index Compared with Al Rayan index using Al Rayan Divisor

	Monthly Indices Values Used in Figure 3				
Month	Al Rayan Islamic Index	QZTI (Capped)	QZTI (Un-Capped)	Index of Common Companies (Capped)	Index of Common Companies (Un-Capped)
Jan-13	2,027.59	1,318.57	1,547.03	870.32	1,230.75
Feb-13	2,008.18	1,282.29	1,485.32	859.07	1,192.89
Mar-13	1,996.70	1,240.70	1,450.89	834.66	1,169.62
Apr-13	2,017.15	1,215.22	1,427.64	831.08	1,156.10
May-13	2,135.14	1,322.06	1,539.47	882.86	1,232.28
Jun-13	2,144.39	1,334.65	1,550.66	891.25	1,239.65
Jul-13	2,147.58	1,333.45	1,553.52	900.94	1,251.77
Aug-13	2,102.17	1,317.28	1,555.97	897.14	1,249.20
Sep-13	2,111.18	1,326.39	1,555.63	901.22	1,250.44
Oct-13	2,153.47	1,353.35	1,579.10	923.12	1,279.57
Nov-13	2,320.68	1,445.97	1,702.67	1,004.77	1,398.40
Dec-13	2,323.95	1,440.11	1,677.26	1,008.74	1,379.76
Jan-14	2,462.16	1,527.51	1,750.67	1,055.55	1,425.19
Feb-14	2,555.65	1,568.02	1,824.11	1,099.05	1,500.68
Mar-14	2,642.34	1,609.28	1,877.86	1,155.41	1,564.84
Apr-14	3,070.89	1,674.84	2,412.19	1,374.71	1,832.19
May-14	3,397.63	2,106.58	2,514.80	1,476.90	2,061.06
Jun-14	2,780.76	1,751.38	2,044.50	1,211.76	1,672.36
Jul-14	3,143.96	1,949.75	2,339.49	1,392.62	1,955.27
Aug-14	3,433.96	2,028.13	2,456.66	1,512.12	2,088.23
Sep-14	3,411.20	2,081.27	2,490.89	1,514.04	2,082.09
Oct-14	3,310.96	2,045.53	2,441.95	1,483.32	2,052.46
Nov-14	3,126.82	1,871.05	2,239.76	1,374.36	1,897.21
Dec-14	3,002.23	1,777.89	2,145.65	1,338.36	1,842.53
Jan-15	2,956.08	1,964.40	2,235.40	1,505.55	1,918.94
Feb-15	3,231.06	2,166.53	2,428.96	1,665.49	2,083.42
Mar-15	3,018.36	2,067.62	2,323.91	1,581.38	1,988.57
Apr-15	3,249.54	2,206.15	2,459.34	1,685.67	2,100.39
May-15	3,237.13	2,242.97	2,480.09	1,690.75	2,099.25
Jun-15	3,326.00	2,272.94	2,527.98	1,724.19	2,149.53
Jul-15	3,244.70	2,218.11	2,465.56	1,685.13	2,097.99
Aug-15	3,110.66	2,141.94	2,376.45	1,585.91	1,992.98
Sep-15	3,037.45	2,105.52	2,342.72	1,554.64	1,962.80
Oct-15	3,108.36	2,149.70	2,398.68	1,583.83	2,008.43
Nov-15	2,672.84	1,864.63	2,100.66	1,392.95	1,775.36
Dec-15	2,712.18	1,846.00	2,086.61	1,377.13	1,763.25
Jan-16	2,371.77	1,568.35	1,774.12	1,209.12	1,526.37
Feb-16	2,525.57	1,696.48	1,914.67	1,312.40	1,649.79
Mar-16	2,761.68	1,901.85	2,080.39	1,450.14	1,768.86
Apr-16	2,681.84	1,825.09	1,990.38	1,378.10	1,678.70
May-16	2,527.18	1,700.67	1,865.87	1,296.84	1,575.87

	Monthly Indices Values Used in Figure 3				
Month	Al Rayan Islamic Index	QZTI (Capped)	QZTI (Un-Capped)	Index of Common Companies (Capped)	Index of Common Companies (Un-Capped)
Jun-16	2,585.24	1,807.61	1,968.46	1,372.64	1,662.55
Jul-16	2,762.12	1,936.93	2,119.55	1,467.23	1,789.03
Aug-16	2,816.14	1,953.83	2,159.80	1,501.42	1,843.04
Sep-16	2,657.90	1,824.93	2,022.04	1,420.15	1,736.51
Oct-16	2,529.59	1,754.86	1,952.66	1,382.04	1,684.96
Nov-16	2,430.86	1,655.16	1,860.07	1,300.79	1,607.79
Dec-16	2,626.28	1,768.13	1,992.28	1,396.44	1,729.05
Jan-17	2,686.87	1,797.99	2,042.30	1,423.14	1,781.29
Feb-17	2,769.34	1,855.87	2,098.33	1,473.04	1,834.31
Mar-17	2,711.70	1,860.75	2,095.66	1,462.09	1,818.11
Apr-17	2,616.80	1,771.76	2,018.11	1,403.14	1,758.22
May-17	2,576.02	1,683.21	1,976.42	1,390.88	1,773.46
Jun-17	2,352.65	1,591.29	1,839.70	1,269.64	1,617.87
Jul-17	2,440.17	1,648.07	1,913.83	1,319.68	1,687.36
Aug-17	2,268.98	1,522.23	1,779.88	1,232.14	1,579.82
Sep-17	2,195.28	1,454.83	1,722.76	1,180.97	1,533.90
Oct-17	2,083.59	1,345.21	1,641.17	1,101.38	1,473.01
Nov-17	1,967.46	1,275.04	1,550.90	1,062.58	1,404.38
Dec-17	2,220.03	1,496.46	1,772.19	1,193.22	1,563.05
Jan-18	2,355.65	1,503.19	1,796.36	1,214.89	1,597.53
Feb-18	2,329.92	1,476.19	1,789.08	1,216.61	1,610.06

Table-4.9:
Values of un-capped and capped QZTI index and Common Companies Index Compared with Al Rayan index using QE Divisor

	Indices Monthly Values Used in Figure 4				
Month	Al Rayan Islamic Index	QZTI (Capped)	QZTI (Un-Capped)	Index of Common companies (Capped)	Index of Common companies (Un-capped)
Jan-13	2,027.59	2,165.59	2,540.80	1,429.38	2,021.35
Feb-13	2,008.18	2,105.99	2,439.45	1,410.91	1,959.17
Mar-13	1,996.70	2,037.69	2,382.90	1,370.82	1,920.96
Apr-13	2,017.15	1,995.84	2,344.72	1,364.95	1,898.75
May-13	2,135.14	2,171.31	2,528.38	1,449.99	2,023.86
Jun-13	2,144.39	2,192.00	2,546.77	1,463.77	2,035.98
Jul-13	2,147.58	2,190.02	2,551.46	1,479.68	2,055.88
Aug-13	2,102.17	2,163.46	2,555.49	1,473.45	2,051.65
Sep-13	2,111.18	2,178.44	2,554.93	1,480.13	2,053.69
Oct-13	2,153.47	2,222.71	2,593.47	1,516.11	2,101.54
Nov-13	2,320.68	2,374.83	2,796.42	1,650.21	2,296.69
Dec-13	2,323.95	2,365.20	2,754.68	1,656.74	2,266.09
Jan-14	2,462.16	2,508.74	2,875.26	1,733.61	2,340.69
Feb-14	2,555.65	2,575.27	2,995.86	1,805.06	2,464.68
Mar-14	2,642.34	2,643.05	3,084.15	1,897.61	2,570.05
Apr-14	3,070.89	2,750.72	3,961.71	2,257.79	3,009.15

	Indices Monthly Values Used in Figure 4				
Month	Al Rayan Islamic Index	QZTI (Capped)	QZTI (Un-Capped)	Index of Common companies (Capped)	Index of Common companies (Un-capped)
May-14	3,397.63	3,459.79	4,130.24	2,425.63	3,385.03
Jun-14	2,780.76	2,876.41	3,357.84	1,990.17	2,746.63
Jul-14	3,143.96	3,202.21	3,842.32	2,287.21	3,211.28
Aug-14	3,433.96	3,330.95	4,034.76	2,483.47	3,429.66
Sep-14	3,411.20	3,418.23	4,090.98	2,486.62	3,419.57
Oct-14	3,310.96	3,359.53	4,010.59	2,436.16	3,370.91
Nov-14	3,126.82	3,072.96	3,678.52	2,257.21	3,115.93
Dec-14	3,002.23	2,919.95	3,523.96	2,198.08	3,026.12
Jan-15	2,956.08	3,226.28	3,671.36	2,472.67	3,151.62
Feb-15	3,231.06	3,558.25	3,989.26	2,735.35	3,421.75
Mar-15	3,018.36	3,395.81	3,816.73	2,597.21	3,265.97
Apr-15	3,249.54	3,623.32	4,039.16	2,768.50	3,449.63
May-15	3,237.13	3,683.80	4,073.24	2,776.85	3,447.76
Jun-15	3,326.00	3,733.02	4,151.89	2,831.77	3,530.34
Jul-15	3,244.70	3,642.96	4,049.37	2,767.62	3,445.68
Aug-15	3,110.66	3,517.87	3,903.02	2,604.65	3,273.22
Sep-15	3,037.45	3,458.05	3,847.63	2,553.30	3,223.66
Oct-15	3,108.36	3,530.61	3,939.53	2,601.24	3,298.59
Nov-15	2,672.84	3,062.42	3,450.07	2,287.74	2,915.81
Dec-15	2,712.18	3,031.82	3,426.99	2,261.75	2,895.91
Jan-16	2,371.77	2,575.82	2,913.76	1,985.82	2,506.87
Feb-16	2,525.57	2,786.25	3,144.61	2,155.45	2,709.57
Mar-16	2,761.68	3,123.56	3,416.77	2,381.67	2,905.13
Apr-16	2,681.84	2,997.49	3,268.94	2,263.35	2,757.05
May-16	2,527.18	2,793.14	3,064.46	2,129.89	2,588.17
Jun-16	2,585.24	2,968.76	3,232.95	2,254.39	2,730.54
Jul-16	2,762.12	3,181.16	3,481.09	2,409.73	2,938.26
Aug-16	2,816.14	3,208.92	3,547.20	2,465.90	3,026.96
Sep-16	2,657.90	2,997.22	3,320.95	2,332.42	2,851.99
Oct-16	2,529.59	2,882.13	3,207.00	2,269.83	2,767.33
Nov-16	2,430.86	2,718.39	3,054.94	2,136.39	2,640.59
Dec-16	2,626.28	2,903.94	3,272.07	2,293.48	2,839.74
Jan-17	2,686.87	2,952.97	3,354.21	2,337.32	2,925.55
Feb-17	2,769.34	3,048.03	3,446.24	2,419.28	3,012.62
Mar-17	2,711.70	3,056.04	3,441.86	2,401.30	2,986.02
Apr-17	2,616.80	2,909.89	3,314.49	2,304.48	2,887.65
May-17	2,576.02	2,764.45	3,246.02	2,284.35	2,912.68
Jun-17	2,352.65	2,613.49	3,021.47	2,085.22	2,657.15
Jul-17	2,440.17	2,706.75	3,143.23	2,167.41	2,771.27
Aug-17	2,268.98	2,500.07	2,923.23	2,023.64	2,594.66
Sep-17	2,195.28	2,389.37	2,829.42	1,939.60	2,519.23
Oct-17	2,083.59	2,209.34	2,695.42	1,808.87	2,419.23
Nov-17	1,967.46	2,094.08	2,547.16	1,745.15	2,306.51
Dec-17	2,220.03	2,457.75	2,910.60	1,959.71	2,567.12
Jan-18	2,355.65	2,468.81	2,950.30	1,995.30	2,623.74
Feb-18	2,329.92	2,424.45	2,938.34	1,998.13	2,644.32