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Shariah Screening Methodologies: SAC-SC vs DJIM Comparative Study and Impact Assessment on Their Performance

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Abstract: The purpose of this paper is to compare between two screening methodologies in terms of applied methods and the impact assessment. Other than this the paper measures the performance of screened stocks in terms of risk & return and compare it to the conventional ones. The methods used are a combination of archival and bibliographic research based on some previously published articles. Also the papers use secondary data from published reports. The paper identifies the impact assessment of the screening methodologies and how investors will not sacrifice part of their returns in order to achieve their moral and ethical values. Many studies compared the two screening indices in term of methodologies; however this paper investigates and uses a quantitative analysis on the impact and performance of the screening methodologies. Furthermore it compares the stages of screening between Shariah Advisory Council of Securities commission (SAC-SC) and Dow Jones Islamic Market Index (DJIM).

Keywords: screening, methodologies, impact assessment

Introduction

Islam is a religion that encourages seeking wealth and protecting it, while at the same time it forbids the collection of wealth from illegal sources. It is our responsibility as Muslims to supervise and to insure the permissible channels that we put our wealth in because this wealth belongs to Allah and we are only trustees. For this reason the regulators and legislators took actions through history to facilitate and to clarify the permissible investing channels. This started by the prohibition of the major non-permissible activities (Riba, Gharar, Gambling, Liquor etc.) in the Holy Quran, then during the Prophet's (PBUH) era things developed and from there the Prophet guided people for to the right way. Time goes on and each era has its scholars which guided people to the right way of doing transactions and growing wealth.

Today when we talk about wealth then we are talking about investment, they are just synonyms (Zainudin, Miskam, & Sulaiman, 2014). As Islamic financial system is witnessing a dramatic growth throughout the last 5 decades, there were a lot of facts that contributed in this significant growth. Having clear strategies and regulations eased the path to the positive innovations and initiatives. Shariah stock screening methodology was one of the innovations, it was formulated by the shariah advisory board of Securities commission of Malaysia (SAC-SC) in the mid 1990's for the purpose of assisting investors to find their suitable investments as it doesn't contradict the shariah principles (Najib, Hamid, Nasrudin, & Saiti, 2014). According to securities commission in their Islamic fund and wealth management blueprint report, "The screening process enables individual and institutional investors to ensure their portfolios are in line with Shariah requirements" (SC S. C., 2017) (Securities commission,p.8). After this initiative form the securities commission Malaysia, other organizations moved towards the same objective which is to make it easy for Muslim investors to find a shariah-compliant investment channels. From there was the establishment of Dow Jones Islamic Market Index (DJIM) in 1999.

The comparison between these screening methodologies will help showing the differences in terms of the used methods and the impact assessment of their stock screening, along with this; it permits to measure their performance in terms of risk and return.

Economically speaking, the case study allows us to know whether the Muslim investor took the right decision in investing in shariah compliant stocks in terms of financial performance and returns. Will Shariah screening indices affect the investor's portfolios performance who seeks to gain the ethical and religious values? This paper has a main purpose to answer the previous questions with empirical evidences.

Shariah Advisory Council of Securities Commission (SAC-SC)

Starting with idea to develop the Malaysia national capital market, the securities Commission of Malaysia has identified the development of the Islamic capital market as one of its main agendas. This agenda was later incorporated into the Malaysian Capital Market Master plan. One of the main objectives set by this plan is to establish Malaysia as an international Islamic capital market center (SAC-SC, 2006).

However, Malaysia was the first Muslim country with a conventional stock market to have come up with a formal evaluation for Shariah compliant stocks and a Shariah stock index at the mid-1990 (Najib, Hamid, Nasarudin, & Saiti, 2014). Shariah screening methodology in Malaysia has been established in accordance with the infancy of the Islamic Capital Market (ICM). Since then, the ICM has shown a huge progress. Shariah screening methodology was formulated by the Shariah Advisory Council (SAC) of Securities Commission (SC) of Malaysia to assist investors in identifying Shariah-compliant securities. This is to ensure that their investments are in accordance with Shariah principles which prohibit the elements of riba, maysir and gharar (Zainudin, Miskam, & Sulaiman, 2014). The SAC of the SC plays an important role in certifying and updating the list of securities that have been classified as Shariah-compliant securities. This Shariah-compliant certification is done through the input and support received from the SC. To classify securities as whether it complies with Shariah or not, SAC will analyze the data gathered by SC from various sources including the annual reports and enquiries made to the companies. Based on the latest annual audited financial statements of the companies, the SAC continuously reviews the Shariah status of listed companies. The SAC has applied a standard criterion to evaluate the business activities of the companies and companies whose activities are not contrary to the Shariah principles will be classified as Shariah-compliant securities (Securities Commission Malaysia, 2013a).

The SAC had established this Shariah screening methodology to undertake Shariah screening process for listed companies in Bursa Malaysia (formerly known as Kuala Lumpur Stock Exchange (KLSE)) with the introduction of four activity-based screening benchmarks in 1995. The methodology comprises two assessments, quantitative assessments and qualitative assessments. The first List of Shariah-compliant Securities was announced and published in Jun 1997 (Hussin & Borhan, 2009). Starting from 1998, the announcement of official list for Shariah-compliant securities is made twice a year and the announcement was streamlined to April and October beginning year 2000. However, the announcement was changed to May and November each year starting year 2007 till present (SAC-SC S. a., 2013) (Hassan & Mahlknecht, 2011) .

Dow Jones Islamic Market Index (DJIM)

Dow Jones Index is a leader in creating innovative indexes for established and emerging markets. The Dow Jones Islamic Market Index (DJIM) was launched in Bahrain on February 9, 1999. The DJIM was launched because a global Islamic index did not exist, and Dow Jones Indexes' objective was for the DJIM to become the industry benchmark. However, Islamic funds and fund sponsors were seeking an established index provider to create a shariah compliant benchmark and a universe to structure shariah compliant investment products

(Moran, 1999). Moreover, as part of development in Islamic capital markets, during 1999, Dow Jones launched a number of Islamic market indices. Dow Jones Islamic World Index, Dow Jones Islamic Market USA Index, Dow Jones Islamic Market Asia/Pacific Index and Dow Jones Islamic Market Index were introduced in May 1999, while Dow Jones Islamic Market Titans 100 Index was introduced in 2009. These indices with distinct focus – from global to regional – apply Shariah screening and the securities included must be based on the Shariah compliant screening (farooq & Reza, 2014).

Furthermore, the DJIMI excludes from the index universe any industry group that represents an incompatible line of business with Islamic principles. Those activities include tobacco, alcoholic beverages, pork, gambling, arms, pornography, hotel and leisure industry, and conventional financial services. (Hussein, 2007). Therefore, the index eligibility will be determined through screening and to ensure that they meet the standards set out in the published methodology. Companies must meet Shariah requirements for acceptable products, business activities, debt levels, and interest income and expenses. The screening methodology is subject to input from an independent Shariah supervisory board. By screening stocks for consistency with Shariah law, the indices help to reduce research costs and compliance concerns Muslim investors would otherwise face in constructing Islamic investment portfolios (Najib, Hamid, Nasrudin, & Saiti, 2014). In terms of cost reduction the shariah screening methods makes it easier for the organization to screen their revenues and expenses without any in-house expenses (Nainggolan, Yunieta, How, & verhoeven, 2013).

Shariah Stock Screening Methodologies

Quantitative method

The objective of this stage is to analyze the contribution of non permissible activities to the company's total turnover (Najib, Hamid, Nasrudin, & Saiti, 2014). Based on this contribution the screening bodies can tell if this company is shariah compliant or not. There are few differences between Shariah Advisory Council of SC and Dow Jones Islamic Market in choosing the variables.

Activity Based Benchmark:

a. SAC-SC

The first step is to determine the total earnings (total income/revenue) and profit before taxation. The following step is to determine the earnings and profit from non permissible activities. The last step is to determine the contribution through a mathematical equation.

$$a.\ \frac{\text{earnings from non permissible activites}}{\text{total eanings of the company}}\ x100$$

$$b.\ \frac{\text{profit of non permissible activites}}{\text{total profit of the company}}\ x100$$

Table 1

The table SAC-SC introduces the two following benchmarks to compare the results.

5 %	Measuring the level of contribution of activities which are clearly prohibited. *Conventional banking - Conventional insurance - Gambling - Liquor and liquor-related activities - Pork and pork-related activities - Shariah Non-Compliant entertainment - Tobacco and tobacco-related activities.* (Kasi & Muhammad, 2016)
20 %	Measuring the level of contribution of activities that is generally permissible and has an element of public interest. *Hotel and resort operations - Rental received from Shariah Non-Compliant activities -*

b. DJIM

For the activity based benchmark Dow Jones Islamic Market is stricter than the SAC of SC (Zainudin, Miskam, & Sulaiman, 2014). Dow Jones Islamic Market takes strictly into consideration the contribution of the income from non permissible activities to the company's total income. In fact, Dow Jones Islamic Market begins by elimination stocks of all companies that are involved in an exhaustive list of activities (Najib, Hamid, Nasarudin, & Saiti, 2014). The list consists of alcohol, pork, non ethical investments, conventional financial sectors etc. If any financial contribution of the company comes from an impermissible activity, the firm is automatically dropped. According to the S&P Dow Jones report:

Income generated from shariah non-compliant activities (except for interest) can be tolerated in certain cases only, and then it follows the 5% benchmark. The purpose of this benchmark is to make investors aware of the purification ratio (DJIM, 2017).

$$\frac{non\ permissible\ income}{total\ revenue} \times 100 < 5\%$$

$$\text{Purification ratio: dividends} \times \frac{non\ permissible\ income}{total\ revenue} \times 100$$

If they comply with the following threshold: (Non-Permissible Income other than Interest Income) / Revenue < 5% Dividend Purification Ratio. This ratio is provided to investors for purification purposes, it is calculated as: Dividends * (Non Permissible Revenue / Total Revenue). The concept of purification has been widely encouraged to be adopted in the various methodologies, the purification model is subject to a careful calculation because the sinful earnings are subject to purification at the end of the day based on computerized system together with in-depth manual research in order to achieve a consistent results on the screening (Donia & Marzban, 2008). In this respect the DJIM is the only methodology adopting the purification model throughout the screening process.

Financial Ratio Benchmark:

a. *SAC - SC*

The Shariah Advisory Council of the SAC introduced a new benchmark which is related to the screening process for financial ratios of the company. In order to fulfill the requirement for this assessment, each ratio must be less than 33% and only securities issued by company that meet the requirement in all assessments will be classified as Shariah compliant securities (SC S. C., 2012). The 33% benchmark consists of two ratios to be calculated and the total should not exceed the benchmark.

- Cash over the total asset. This stage includes only cash placed in conventional instruments or accounts. Note that cash deposited in Islamic accounts is not taken into consideration.

$$\frac{Cash}{total\ assets} \times 100 < 33\%$$

- Debt over total assets. This stage includes only interest-bearing debts. Note that Islamic financing instruments or sukuk are not taken into consideration (ISRA, 2015).
- $\frac{debt}{total\ assets} \times 100 < 33\%$

To pass the test each financial ratio must be less than 33%, after that the company will be deemed as shariah compliant securities (Securities comission, 2013c).

b. DJIM

As mentioned above, Dow Jones Islamic Market is stricter and doesn't take the same financial ratios as SAC of SC, here Dow Jones Islamic Market introduces the same benchmark of 33% but with different criteria using different variables, being different from SAC of SC it introduces three ratios. Different from SAC-SC DJIM uses average market capitalization[1] as denominator. The below mathematical analysis has a main objective is to identify companies with a non tolerated levels of interest income.

- Total debt over average market capitalization. Total debts consist of short and long term debts.
$$\frac{Debt}{average\ market\ capitalization} \times 100 < 33\%$$
- Cash and interest bearing debts over market capitalization
$$\frac{Cas}{average\ market\ capitlalization} \times 100 < 33\%$$
- Account receivables over average market capitalization. Current receivables and long term receivable are included.
$$\frac{Account\ recievables}{average\ market\ capitalization} \times 100 < 33\%$$

The difference in the quantitative methods of the indices results in different findings. The number of shariah approved securities from the securities commission Malaysia list is higher than the ones listed in Dow Jones Islamic Market due to the more restricted screening framework and the strict methodology applied by Dow Jones Islamic Market Islamic Market index.

Qualitative method:

The second method does not depend on mathematical analysis but it depends on the quality of services that the company provides. The qualitative method is used essentially on case by case method.

Before going into the qualitative method, one of the main differences between SAC-SC and DJIM is that from the Malaysian context the SAC-SC screening methodology is a regulatory methodology that should be followed since according to securities commission (Najib, Hamid, Nasrudin, & Saiti, 2014), the shariah compliant assets in Malaysia should strictly follow and succeed the screening process by keeping the overall conditions. In the other hand, the DJIM is globalized screening methodology as well as known index provider since the conventional Dow Jones is considered as the most performed index provider globally.

For the Shariah advisory council of Securities commission and Dow Jones Islamic Market, there is slight difference in the qualitative screening process, because this stage of screening is more of general and not dealing with specific numeric data. There following three statements are considered as the screening test that companies should go through in order to be declared as shariah compliant according to SAC-SC (Kasi & Muhammad, 2016). Note: only SAC-SC takes into consideration the 3 conditions. DJIM only takes the first

[1] Average market capitalization can be based on 1 year (12 months), 2 years (24 months), or 3 years (36 months) average market capitalization, it varies depending on the volatility of the market. The more volatile the market is the longer duration is used for the average calculation. This is to insure the stability of the indices. (ISRA, 2015).

1. First, the company's core activity must not be a forbidden activity (Interest, Gambling, Uncertainty, Prohibited products). Also, the non permissible elements should present a small percentage to the main activity of the business (NAJIB, HAMID, NASARUDIN, & SAITI, 2014). — BOTH
2. Second, the most important thing is that image or the public perception of the company. In other words the main activity must have an importance to the society or common benefit (Maslaha) (Zainudin, Miskam, & Sulaiman, 2014). — ONLY SAC-SC
3. Third, the non permissible activities contributions should be small, beside that it should involve Umum balwa (common plight) and customs, also it involves the rights of non-Muslim community (NAJIB, HAMID, NASARUDIN, & SAITI, 2014). — ONLY SAC-SC

Comparison between the previous and revised screening methodology of SAC

The Security Commission of Malaysia initially formed a Department of Islamic Capital Market (ICMD) who later on, under its strategy and development business group, recommended the establishment of The Shariah advisory council.

Upon effort from the Malaysian government to further advancing the Islamic capital market, and within the premises of the master market plan 2, a new screening methodology was introduced in 2013 promoting more rigidity in granting the Shariah compliance status, especially when the SAC–SC was considered more liberal than the other international indices.

The new methodology consisted in dropping the first stage screening which focused on the activities of the company, now the screening process start directly with the first tier of the quantitative assessment regarding the calculation of the contribution of the non-permissible activities, however the benchmarks have been reduced previously, the contribution from conventional banking and insurance, gambling, non halal food and beverages were benchmarked at 5%; interest income from conventional accounts and instruments, and other activities deemed non-compliant such as tobacco at 10%; rental received from Shariah non-compliant activities at 20%; hotel and resort operations, share trading were set at 25%. While in the revised methodology the changes that took place are the 10% benchmark was reduced to 5%, and same for the 25% it was tighten to become 20% (Zainal, Kasim, Zakaria, & Mohamed, 2016).

Regarding the second tier of the quantitative assessment, the financial ratio is the newest addition of the revised methodology and did not existed prior 2013, and regarding the qualitative assessment, no changes was affected to the criteria and remain to the discretion of the SAC.

Table 2

Comparison between the Business Activity Benchmark and Financial Ratio

	Previous	Revised	Activity
Business Activity Benchmark	5%	5%	Conventional banking; Conventional insurance; Gambling; Liquor and liquor-related activities; Pork and pork-related activities; Non-halal food and beverages; Shariah non- compliant entertainment; and other activities deemed non- compliant according to Shariah.
	10%		Interest income from conventional accounts and instruments; Tobacco and tobacco-related activities; and other activities deemed non-compliant according to Shariah.
	20%	20%	Rental received from Shariah non-compliant activities; and other activities deemed non-compliant according to Shariah
	25%		Hotel and resort operations; Share trading; Stock-broking business; and other activities deemed non-compliant according to Shariah.
Financial Ratio Benchmark	None	33%	Non-compliant cash deposit over total assets Non-compliant debt over total assets

To put things in perspective, we can see from the appendixes below how the percentage of Shariah compliant securities dropped by 17% within the spec of six months, coinciding with the period in which the newly revised methodology took effect.

Table 3

List of Shariah - Compliant Securities – May 2013 (Before Revision)

Main Market/ ACE Market	Shariah-compliant securities	Total securities[4]	Percentage of Shariah-compliant securities (%)
Consumer products	122	132	92
Industrial products	253	263	96
Mining	1	1	100
Construction	41	44	93
Trading/Services	174	202	86
Properties	71	84	85
Plantation	37	40	93
Technology	93	95	98
Infrastructure (IPC)	6	6	100
Finance	2	37	5
SPAC	1	1	100
Hotels	Nil	4	Nil
Closed-end fund	Nil	1	Nil
Total	**801**	**910**	**88**

Table 4
List of Shariah - Compliant Securities – November 2013

Pasaran Utama/ Pasaran ACE *Main Market/ ACE Market*	Bilangan sekuriti patuh syariah *Number of Shariah-compliant securities*	Jumlah sekuriti* *Total securities**	Peratus sekuriti patuh Syariah (%) *Percentage of Shariah-compliant securities (%)*
Barangan pengguna *Consumer products*	106	133	80
Barangan industri *Industrial products*	194	261	74
Perlombongan *Mining*	1	1	100
Pembinaan *Construction*	36	44	82
Dagangan/Khidmat *Trading/Services*	143	206	69
Hartanah *Properties*	59	86	69
Perladangan *Plantation*	34	39	87
Teknologi *Technology*	71	95	75
Infrastuktur *Infrastructure (IPC)*	5	6	83
Kewangan *Finance*	2	36	6
SPAC *SPAC*	2	2	100
Hotel *Hotels*	Tiada Nil	4	Tiada Nil
Dana tertutup *Closed-end fund*	Tiada Nil	1	Tiada Nil
Jumlah *Total*	**653**	**914**	**71**

Impact of Inclusion and Exclusion from the SAC-SC

Based on a study about the Impact of Inclusion into and Exclusion from the Shariah Index; the study analyze a sample consisting of 107 additions and 95 deletions from the Financial Times Stock Exchange Bursa Malaysia EMAS Shariah Index in the period of June 2007 - June 2014. The empirical study demonstrate how before the 2013 change in SC's methodology screening, the inclusion into the index had no significant effect on both price and volume, but in the cases where stocks got excluded, they earned negative returns and below normal volume, but only in the short term period, since the situation stabilized afterwards (Kassim, Ramlee, & Kassim, 2017).

However, after the new methodology was introduced, the Stocks added exhibited significant long-term excess return, as well as substantial increase in the Trading volume ratio; and as for the cases of exclusion, negative but temporary signs are manifested in both the price and volume.

This correlation between the index and the symptoms exhibited can be linked to the increase in investor's awareness for included stocks, also its fair to assume that the addition to the index may result into the increase in awareness about the stock itself to investors and the financial analyst; another important note is that the recognition of a stock as Shariah compliant consequently classified it as eligible investment possibility by Islamic funds and takaful operators that only invest in Shariah compliant channels, and vice versa, its exclusion will systematically make the stock disqualified.

Impact assessment of the financial performance of Islamic indices structured under SAC-SC and DJIM screening methodologies vis-à-vis its conventional peers

The main purpose and objective of this section is to identify and examine the existence of diversification opportunities that steams from the advantageous differentiation between the Islamic stock indices and their conventional peers due to a potential negative correlation and investigate the financial performance of the Islamic indices vis-à-vis its conventional counterparts and clarify whether the former underperforms the latter or not under the two different shariah screening methodologies introduced in the previous sections. Furthermore, we empirically attempt to negate the assumption of the low diversification and the stringent shariah screen process that may result in a higher portfolio risk profile.

To start our analyses, we begin with the Dow Jones Islamic Market screening methodology and try to investigate the impact assessment of this methodology on the performance of its Islamic index comparing to the mainstream Dow Jones Islamic Market index. Our first analyses were conducted by Al-khazali. Al (2014), the research data collected was based on the daily returns of two groups of indexes for the total of 18 indexes, nine Islamic and nine conventional Dow Jones Islamic Market indexes from global markets namely from developed country, Asia pacific, Canadian, Emerging Markets, European, Global, Japanese, UK, and US indexes. For each of these indexes, we choose the conventional index that matches with its Islamic peer. The data also was collected from the period January 2, 1996 to December 31, 2012. The analyses use risk a adjusted measurements derived from the CAPM including beta, Sharpe Ratio, Treynor Index and Jensen's Alpha. The table 5 below depicts the calculations of the risk adjusted measurement for both Islamic and mainstream indices.

Table 5
Calculations of The Risk Adjusted Measurement for Both Islamic and Mainstream Indices

	Beta		Sharpe		Treynor		Jensen	
	Islamic	Conv.	Islamic	Conv.	Islamic	Conv.	Islamic	Conv.
Panel A: 1996–2012								
Asia Pacific	0.5612	0.7523	0.0167	0.0007	0.0003	0.0002	0.0001	0.0001
Canada	0.7931	0.8545	0.0181	0.0284	0.0002	0.0002	0.0000	0.0000
Developed	0.9316	1.1223	0.0254	0.0217	0.0005	0.0003	0.0002	0.0001
Emerging	0.6723	0.8741	0.0188	0.0182	0.0003	0.0003	0.0002	0.0002
Europe	0.9532	1.2304	0.0196	0.0150	0.0002	0.0003	0.0001	0.0001
Global	0.8542	1.0021	0.0266	0.0223	0.0003	0.0004	0.0002	0.0001
Japan	0.5716	0.8725	0.0077	0.0015	0.0006	0.0004	0.0005	0.0003
UK	0.4605	0.8518	0.0188	0.0193	0.0005	0.0006	0.0000	0.0000
US	0.5525	0.9509	0.0222	0.0207	0.0004	0.0005	0.0003	0.0003

The observations from the table are as follow:

1. Beta measure is positive for all indexes. Beta is greater for the conventional indexes than Islamic ones which mean that Islamic indexes are less risky and less affected to the systematic risk than its mainstreams peers.
2. The Sharpe ratio is higher in Islamic indexes compared to their conventional counterparts over the entire period which indicates a higher risk adjusted return rate.
3. Treynor and Jensen ratios are quite similar between Islamic and conventional Indexes for the entire period as well.
4. The Correlation between Islamic indexes and conventional indexes was positive and high which means that both indexes move to some extend in the same direction during bull or bear markets and for pre-and post-financial crisis.

Table 6

Dow Jones Islamic Market Indexes from Global Markets

	Asia Pacific	Canada	Developed	Emerging	Europe	Global	Japan	UK	US
1996-2012	0.9153	0.9416	0.9577	0.9732	0.9382	0.9586	0.7468	0.9644	0.9561
1996-2000	0.9124	0.9226	0.9221	0.9515	0.9221	0.9426	0.7642	0.9342	0.9441
2001-2006	0.8552	0.9012	0.8932	0.9226	0.9101	0.8921	0.7445	0.9116	0.9726
2007-2012	0.9318	0.9125	0.9323	0.9636	0.9502	0.9534	0.7923	0.9727	0.9521

The findings from this study negate the general perception that says Islamic screened investing will probably underperform conventional investing and will burden the investors with riskier and less performing portfolios due to the lack of the diversification which is knows as diversification risk (Al-khazali, Hooi, & Samet, 2014).

The second study employs the same risk-adjusted measurements in the Malaysian stock market to compare the performance of the Islamic index KLSI to the conventional peer KLCI which is also the stock market index.

The data collected is from the Data over the period from April 1999 to December 2005.the daily return is depicted as follow

Figure 1

The Daily Returns for KLCI and KLSI

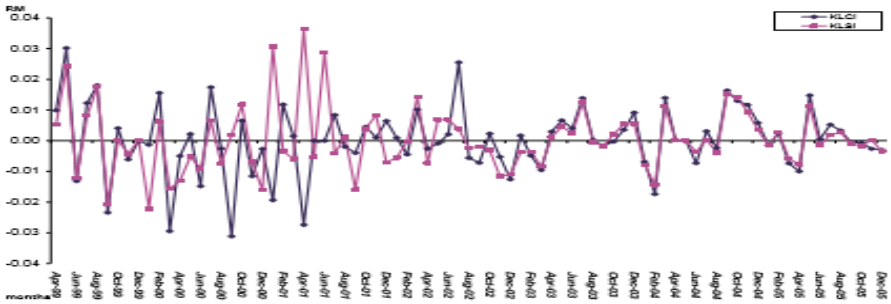

Table 7 below shows the risk-adjusted returns for each index using four different measurements. KLSI appears to provide less adjusted returns than KLCI meanwhile it appears less risky which is relevant to its Beta level and which reflect the concept of risk return trade off and is in compliance with the portfolio efficiency theory. In addition to that the researchers explained the outperformance of the conventional index over the Islamic index due to inclusion of large market capitalization in the former one hence, investors who choose shariah compliant securities are not substantially worse off than those who choose the conventional securities as their motive behind this type of investment stems from their moral ethics and values.

Table 7

Risk Adjusted Performance and Beta of KLCI and KLSI

Index	Sharpe ratio	Treynor index	Jensen alpha	Beta	eSDAR
KLSI	0.00301	0.00002972	–0.01245	0.9954	–0.3468278
KLCI	0.00959	0.00010126	–0.00875	0.9968	–0.1434626

Source: Albaity & Ahmad, 2008

The following study has focused on the pre-and post-financial crisis and its impact on the performance and return on both Islamic and conventional stock indices. Hence the date collected restricted the period of study from April 2008 to December 2014 and six global Islamic and conventional indices from two countries namely the unites states and Malaysia are examined as the tables below depict both pre-and post-crisis respectively.

Table 8
Pre-Crisis

	DJIA	DJIMI	S&P 500	S&PS	KLCI	KLCIH
Beta	0.9789368	0.9725868	1.0951927	0.9780058	0.2843418	0.2861454
Sharpe	-0.4436610	-0.3807081	-0.4478632	-0.3400628	-0.3668702	-0.6488608
Treynor	-0.0092755	-0.0091858	-0.0082906	-0.0089613	-0.0300033	-0.0303562
Jensen	0.0117192	0.0117304	0.0141895	0.0120153	-0.0024898	-0.0026066

Table 9
Post-Crisis

	DJIA	DJIMI	S&P 500	S&PS	KLCI	KLCIH
Beta	0.8679200	0.9811007	0.9710400	0.9266958	0.3736332	0.3789655
Sharpe	-0.0279060	-0.0410823	1.0255287	0.8812492	0.7691648	0.9117249
Treynor	-0.0002905	-0.0003798	0.0094737	0.0094823	0.0196787	0.0195464
Jensen	0.0000853	0.0000088	0.0095767	0.0091474	0.0074978	0.0075547

According to the risk adjusted measurement used in this study we notice that in the pre-crisis period all returns are negative while they gain a positive return during the post-crisis period. The negative Sharpe ratio indicates portfolio return is lower than the risk-free market return. Beta between Shariah compliant and conventional indices have a similar value meaning that both indices are moving at the same direction and incorporate a positive correlation.

The findings of this study support the previous findings from the two studies and strengthen the perception that the application of Shariah screening does not have an adverse impact on the Shariah-compliant indices performance and that the conventional indices do not provide superior performance.(Mohd Safwan Afiq Mohd Nasir, 2016).

The last part of this section we provide updated data concerning the return and performance for both two types of shariah screening methodologies we used in our comparative case study.

Figure 2

Group FTSE 2017 – Bursa Malaysia

Figure 3

Dow Jones Islamic Market Islamic Market World Index - S&P Dow Jones Indices

The charts show a similar total return trend for both FTSE burse Malaysia EMAS shariah which is screened based on Malaysian securities commissions methodology and Dow Jones Islamic Market Islamic market world and their relevant mainstream counterparts. Moreover, Dow Jones Islamic Market outperformed the global Dow Jones Islamic Market during the financial crisis and post crisis period (mid 2008 till 2016).

Conclusion

After comparing between the two screening methodologies we can conclude by saying that the differences in stock screening methodologies ends up by different results. The strict application of passive screening by DJIM eliminates a lot of stock more than SAC-SC. There should be harmonized screening methodology standards because this creates an obstacle for foreign investing. The non harmonization is affecting negatively the investment decision based

on the gap between the process methodologies and their background. In this respect, since shariah screening process is executed differently by different methodologies based on stipulations, such practice leads to inconsistency in terms of norms and practices. Along with the absence of standardized practice eventually is deemed to hamper the progress of Islamic equity market and it may lower the confidence of investors in the future (Sheila & Syed, 2013). The idea of having screening methodologies itself is appreciated because it benefits the Muslim investor financially and also ethically speaking. All the above observation and statistics find out the following:

1. Islamic indices are not underperforming their mainstream counterparts; hence investors are not worse off when investing on this shariah screened indices and not sacrificing their return to satisfy their ethical and religious moral and values.
2. Islamic indices and their mainstream counterparts are highly and positively correlated which gives a small room for portfolio diversification.
3. Islamic indices outperformed its counterparts particularly during the financial crisis so that it can be taken as a hedging strategy on the downturn of the economic conditions. This position can be further enhanced after the new screening methodology and the application of the financial ratios methodology to mitigate the leverage effect and the credit crisis.

For this reason we can finally end up by saying that the investor will not give up a portion of his return to gain his moral values, it has been proven that the performance of shariah screened stocks are not underperforming compared to the conventional ones.

After examining the impact of the shariah screening on the financial performance of eligible stock indices we can make some suggestion as follow:

1. Incorporate an internal shariah screening to the existing one in order to create more diversification opportunities and enhance the total return particular when target and screen large size companies to add market capitalization into the Islamic indices.
2. A combination process between Dow Jones Islamic Market shariah screening and SC shariah screening characteristics as a step ahead for the harmonization and a better financial market global inclusion.

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