EVALUATION OF SHARI'AH NON-COMPLIANCE RISK EXPOSURE IN SHARI'AH STOCKS SCREENING METHODOLOGIES

BY

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ABSTRACT

Shari'ah stocks screening methodologies had a significant impact in the realm of Islamic finance portfolio stocks since the early 1990s. These enabled a more inclusive investment community among overall Islamic financial community that led to the growth of Islamic financial institutions including Islamic banks and takaful. Over the years different Shari'ah stocks screening methodologies have been developed by the leading indices in different jurisdictions both at the agency and regulatory level. All the newly developed Shari'ah screening methodologies shared a common core i.e. screening out the Shari'ah non-compliant business activities e.g. alcohol, gambling. On the other hand, the threshold of the financial ratio was the distinguishing feature among the methodologies from applications of different juristic rulings. Even though Shari'ah stocks screening methodologies are a vital tool for Islamic equities sphere, there is a lack of empirical research on the Shari'ah governance dimension of the Shari'ah stocks screening methodologies. Therefore, understanding the degree of possibility of Shari'ah compliant stocks to become Shari'ah non-compliant will enhance the level of Shari'ah governance of the Shari'ah compliant stocks. The research aims to fill this gap by providing a Shari'ah governance tool for Shari'ah stocks screening methodologies, which will help Islamic investors and stakeholders to better understand the Shari'ah compliant stocks and the mechanisms of Shari'ah stocks screening methodologies around the world. The sample in this research includes 1440 Shari'ah compliant stocks spanning 69 countries with high market capitalization, over a period between 2010-2016/17. The analysis of the sampled stocks is divided into two phases. The first phase is based on modified discriminant analysis function to accommodate the Five global Shari'ah stocks screening methodologies framework i.e. DJ, S&P, FTSE, MSCI and AAOIFI for the year 2016/17. The results of the analysis categorized the sampled stocks into three different levels of Shari'ah compliance with distinct color codes i.e. green, yellow and red. Where green is the low possibility of becoming Shari'ah noncompliant, and red representing the high possibility of becoming Shari'ah noncompliant based on the score developed from the discriminant analysis function. In the second phase, the sampled stocks were analyzed using the modified discriminate function to forecast the Shari'ah governance level for the stock based on trends from historical Shari'ah compliance level of the stocks i.e. green, yellow and red. Forecast results provide the variations of Shari'ah compliance level of the stocks over the years for a robustness evaluation of 5 global Shari'ah stocks screening methodologies. The results highlight that the Standard & Poor and Dow Jones Shari'ah screening methodologies are more robust than others as they have a highest and stable number of green Shari'ah compliant stocks from the sample 1440 stocks from the year 2010 to 2016/17. The Shari'ah compliance trend from the historical data analysis can be further used to forecast the future Shari'ah compliance direction of the stocks. Further analysis includes ANOVA test to study the variance among mean discriminant scores which overall is significant among the Screening methodologies. Moreover, the Levene test is found significant therefore for posthoc test Games-Howell is used. Findings from an independent one-way ANOVA indicated that the discriminant score differs significantly across the 5 screening methodologies.

خلاصة البحث

لقد مثلت منهجيات الفحص الشرعية الإسلامية دوراً كبيراً في مجال الاسثمار في الأوراق المالية في العالم الإسلامي منذ أوائل التسعينيات. وقد مهدت تلك المنهجيات لمجتمع استثماري أكثر شمولية ، مما أدى إلى نمو المؤسسات المالية الإسلامية بما في ذلك البنوك الإسلامية والتكافل بشكل متزايد.و تم تطوير مؤشرات شرعية مختلفة بناءً على منهجيات متعددة لفحص الأسهم و مدي توافقها مع أحكام الشريعة الإسلامية في مختلف أرجاء العالم ، وهذة المؤشرات تم تطوير بعضها من قبل شركات التصنيف الائتماني والبعض الأخرتم تطويره بواسطة جهات تنظيمية في أسواق الأوراق المالية. تنقسم عملية الفحص الشرعي للأسهم الى مرحلتين، المرحلة الأولى تتمثل في تقييم طبيعة النشاط التجاري للشركات المصدرة للأسهم، وهذة المرحلة متشابحة بين منهجيات الفحص المتعددة. حيث يتم استبعاد الأسهم التي تمثل فيها الأنشطة التجارية الغير المتوافقة مع الشريعة الإسلامية ، مثل الكحول ، القمار ، الربا نسبة عالية من نشاط الشركة المرحلة الثانية هي مرحلة فحص النسب المالية ، وهذة المرحلة تتباين فيها حدود النسب المالية الموجوب على الشركات أن لا تتخطها حتى يتم تصنيفها متوافقة مع منهجية الفحص المتبعة .وتختلف تلك الحدود، وأسلوب تقييمها باختلاف الجهات المصدرة لمنهجيات الفحص. على الرغم من أن منهجيات فحص الأسهم الشرعي أداة حيوية في مجال الأسهم الإسلامية ، إلا أن هناك نقصًا في الأبحاث التجريبية حول البعد المتعلق بالحوكمة الشرعية في منهجيات الفحص الشرعي للأسهم.ويهدف البحث إلى سد هذه الفجوة من خلال توفير أداة للحوكمة الشرعية لمنهجيات فحص الأسهم ، والتي ستساعد المستثمرين على فهم للأسهم المتوافقة مع منهجيات الفحص وآليات منهجيات فحص الأسهم الشرعية حول العالم بشكل افضل.ومن هذا المنطلق فإن دراسة احتمالية أن تصبح الأسهم المتوافقة مع منهجيات الفحص الإسلامية غير متوافقة مع منهجيات الفحص الإسلامية خلال فترة زمنية محددة ، سيؤدي إلى تعزيز مستوى الحوكمة الشرعية في الأسهم المتوافقة مع منهجيات الفحص الإسلامية. و لقد شملت عينة الدراسة 1440 من الأسهم المتوافقة مع منهجيات الفحص الإسلامية ذات قيمة سوقية مرتفعة ومتداولة في 69 دولة مختلفة، خلال الفترة ما بين 2010-2017.ولقد خضعت العينة لثلاثة مراحل من التحليل. المرحلة الأولى وهي باستخدام التحليل التمييزي(discriminant analysis function) المعدل للعام (AAOIFI، MSCI ، FTSE ، S&P ، DJ) للعام الإسلامية الاتية : (AAOIFI، MSCI ، FTSE ، S&P ، DJ 2017/206. تم تقسيم نتائج المرحلة الاولى إلى ثلاثة مستويات مختلفة الأخضر،الأصفر، والأحمر. بناءً على نتيجة التحليل عندما تكون احتمالية ان يصبح السهم غير متوافق مع منهجية الفحص على المدى القصير ضعيفاً يتم تصنيفه في المستوي الأخضر، وفي حالة احتمالية ان يصبح السهم غير متوافق مع منهجية الفحص استنادًا إلى النتيجة التي تم تطويرها من وظيفة التحليل التمييزية، يتم تصنيفه في المستوي الأحمر. المرحلة الثانية اشتملت على تحليل الأسهم التي تم أخذ عينات منها باستخدام التحليل التمييزي (discriminant analysis function) المعدل للتنبؤ باحتمالية مخالفة الأسهم لمنهجية الفحص الشرعي أي الأخضر والأصفر والأحمر بناءاً على مستويات الالتزام الشرعي السابقة للأسهم .وتم استخدام نتائج التحليل لتوفير تنبؤ دقيق لاحتمالية أن يصبح السهم غير متوافق مع معايير الفحص الشرعية بناءاً على الأداء السابق للسهم لتحسين الحوكمة الشرعية للأسهم لجميع المنهجيات المتضمنة في الدراسة، وتوضح النتائج أن منهجيات ستاندرد آند بورز (S&P) وداو جونز (DJ) أقوى من غيرها ، حيث تمتلك أكبر عدد من الأسهم في المستوى الأخضر على المدي القريب والمتوسط. المرحلة الثالثة هي اختبار ANOVA لدراسة التباين بين الدرجات التمييزية المتوسطة بين منهجيات الفحص المختلفة واختبار (Games-Howell &Levene test)، والتي أظهرت أن هناك تبايناً واضحاً ومهم ما بين منهجيات الفحص الشرعي المتضمنة في التحليل.

APPROVAL PAGE

The thesis of Usman Khurshid has been approved by the following:

DECLARATION

I hereby declare that this thesis is the result of my	own investigations, except
where otherwise stated. I also declare that it has no	ot been previously or concurrently
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This thesis is dedicated	l to my mother, the iron	lady behind my every
	success and learning.	

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CHAPTER ONE

INTRODUCTION

The chapter highlights the background of Shari'ah stocks screening in Islamic finance, its history, development process and early limitations that were highlighted by the Muslim jurists while developing the Shari'ah stocks screening. This chapter introduces the Shari'ah stocks screening process, the issues and implications of various screening methods and criteria as well as the importance and impact of research. Furthermore, this chapter presents the problem statement, the purpose of the research, objectives of the research, research questions and the significance of the research.

1.1 BACKGROUND OF STUDY

1.1.1 Nature of Corporate Entity and It Legal Status in Islam

In the early days of Islamic finance, the concept of the joint stock company with a separate private legal entity was new from the juristic point of view, therefore initially there were some difficulties in defining the role of Muslim investors to invest in the stock market. The Organization of Islamic Cooperation (OIC) Fiqh academy played a vital role and provided a solution for Muslim investors. In May 1992 OIC Fiqh academy approved the concept of joint stocks stating that "there is no objection in Shari'ah for setting up a company whose liability is limited to its capital for that is known to the company clientele and such awareness on their part precludes deception" (Resolution and recommendations of the council of the Islamic Fiqh Academy 1985-2000, 2000: 130). This Shari'ah ruling proved to be remarkable and vital for the growth of the Islamic finance industry.

Furthermore, in 1998, Shiekh Taqi Usmani also endorsed the concept, making joint stock companies similar to the partnership corporation. Shiekh Taqi Usmani supported

the separate legal entity concept on the bases of Islamic institutions such as waqf, mosque, and bay tul mal (treasury) which are public sector institutes.

The corporate shareholders are considered to be partners as they have share in the paidup capital of the company. Jurists, therefore, have allowed buying and selling of the ordinary shares of the company but the restriction on interest-bearing bonds, debentures, and preference shares remain in place. Though the former is equity and the latter represent debt.

1.1.2 Need for Shari'ah Screening of Corporate Activities

The challenge raised in the trading of shares for the companies which had mix business activities i.e. the combination of Shari'ah compliant and non-compliant business activities. Jurists had to come up with a methodology to separate the Shari'ah compliant and non-compliant companies doing mix business actives. A mixed business activity means a company whose primary or core business activity is Shari'ah compliant i.e. according to the principles of Islam but have some business portion of non-halal income. These companies cannot be considered as Shari'ah non-compliant as in itself but according to an Islamic legal maxim¹ "Consideration is given to the predominant and widespread, not to the paltry and rare". Jurists interpreted as, if the majority of something is permissible, then it becomes permissible in and of itself. Therefore, based on this legal maxim the jurists have allowed the concept of stock market trading of shares of companies which are not 100% permissible.

This however still did not solve the issue of the non-halal income of the companies, therefore the concept of taharah² (purification) was introduced for the Muslim investors who wish to invest in the shares of the company which has some portion of revenues

¹ Muhammad al-Zuhayli, al-Qawa id al Fiqhiyyah, 1:325

² https://muqith.wordpress.com/2010/01/16/purification-at-taharah/

from the non-halal sources. The concept of taharah commonly means purification. One of its uses is the purification of water. Taharah in the purification of water means that if there are some impure substance in the water but it does not change its color, smell or taste then it is considered clean and pure. Therefore, it can be used to do ablution (Wudu). The same analogy (Qiyas) was used for the mixed business companies stock. If a Muslim investor wishes to invest in the stock of a company that does not have 100% halal revenue, then the nature of the core business of the company must remain pure or in other words Shari'ah Compliant. The debt should not be more than a set benchmark, whereas the portion of the non-halal income should also be within the set benchmark set by the Shari'ah Scholars. This, therefore, became the Shari'ah stock screening methodology. Shari'ah scholars helped developed different screening methodologies for different jurisdictions and indices to evaluate the Shari'ah compliance of mix income companies. Catherine (2015).

These Shari'ah screening methodologies determine if the stock is Shari'ah compliant or not i.e. if the core business activities and incomes of the company are from halal sources then it is considered as Shari'ah compliant. The financial ratio analysis of Shari'ah screening methodology focus on financial variables of the organization to determine if the company is Shariah compliant or no, on the same time this analysis provide an extra information to the investor on the financial standing of the organization (which is not the basic purpose of the Shariah stocks screening methodologies, never the less this information can help investor understand the financial stability of the organization). There are two key questions that are addressed in the Shari'ah stocks screening criteria.

 Does the core business activities of the company be deemed Shari'ah impermissible? This is considered as business screening or Qualitative Screening. Does the financial management of the company involve undertaking financial obligations/investments that are not entirely in conformity with Shari'ah? This is considered as financial screening or Quantitative screening. (ISRA, Islamic capital markets, 2015)

1.1.3 Corporate Governance and Shari'ah Governance Framework

The corporate governance is the backbone of any organization and good corporate governance is not the responsibility of one party or an individual in the organization (Sun, Stewart and Pollard, 2013) (Kasim, Htay, and Salman, 2013)

The important component of the good governance in an organization is an effective board (BoD) and efficient management. The board is selected by the shareholders as their agents to overview the work of the management and to give direction related to the objectives of the organization. The board (BoD) is answerable to the shareholders whereas the management is answerable to the board. (Ruin, 2001) (Lefort & Urzua, 2008)

Islamic financial institutions like any other financial institution also require a strong corporate governance system to achieve efficient daily operations and organizational goals. The strong board (BoD) and efficient management are also required in Islamic financial institutions. As Islamic financial institutions or any such organization that work on the Islamic principles must also uphold the Islamic law and values, therefore, to oversee the Islamic principles and values there is another board/committee which consists of the Shari'ah (Islamic law and business) scholars and experts. The corporate governance in Islamic financial institutions is also different from its convention peer i.e. accountability. Shahul Hameed (2000) explained the Islamic accountability in much simpler terms, according to him Islamic accountability or accountability of the Muslim

BOD are two tiers. 1. Primary accountability due to the trustee of Allah (SWT) resources and secondary accountability due to the contract between the owner (shareholder) and manager (BOD). Muslim BOD has this extra accountability compared to the non-Muslim BoD due to the secular view of the latter, which do not mix religion and business.

The roles and responsibilities of the board (BoD), management and Shari'ah committee are explained in a sperate regulation called Shari'ah governance framework (SGF). The SGF works in parallel to the corporate governance framework.

The Shari'ah governance framework as defined by the IFSB (2009) as "A set of institutional and organizational arrangements through which an IFS ensure that there is effective independent oversight of the Shari'ah compliance over each of the following structures and process:

- 1. Issuance of relevant Shari'ah pronouncement/resolution.
- Dissemination of information on such Shari'ah pronouncements/resolutions to
 the operative personnel of the IFS who monitor the day to day compliance of
 the Shari'ah pronouncement/resolution vis a vis every level of operations and
 each transaction;
- 3. An internal Shari'ah compliance review/audit for verifying that Shari'ah compliance has been satisfied, during which any incident of non-compliance will be recorded and reported, and as a possible, addressed and rectified.

An annual Shari'ah compliance review/audit has been appropriately carried out and its findings have been duly noted by the Shari'ah board."³

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³ Islamic financial services board, (2009), Guiding principles on governance for Islamic collective investment schemes (IFSB-6)

There is a comprehensive and detailed Shari'ah governance framework for Islamic banking and takaful industry. Regulatory bodies such as AAOIFI, IFSB, and BNM have issued regulatory papers on the SGF of banking and takaful industry. In 2016 BNM proposed an updated version of its SGF framework and have introduced exposure draft for a new SGF for Islamic banking and takaful industry in Malaysia.

There is no comprehensive Shari'ah governance framework for the Islamic capital market. (Kasim, Htay, and Salman, 2013), although there are comprehensive regulations regarding Islamic capital market in Malaysia and the Middle East. Islamic capital market players such as fund manager, are required to have a full-time Shari'ah committee in their organization, a Shari'ah advisor or Shari'ah advisory firm is hired to oversee the process of developing new products. i.e. Sukuk development and design. The Shari'ah advisor or advisory firm is dependent on the company/fund manager to provide the details of all Islamic finance related activities. There is no continuous Shari'ah oversight by a Shari'ah advisor as once a Islamic financial product is approved and, is in the market after the approval of the Shari'ah committee of the regulatory body such as Securities Commission, the work of Shari'ah advisor is complete and no longer provide any continuous oversight on the product unless there are some market irregularities for which SC or company want advice from the Shariah experts.

For Shari'ah stocks scre6ening, the Shari'ah advisors have developed certain Shari'ah stocks screening methodologies for indices such as Dow Jones, Standard & Poor, MSCI, FTSE, and AAOIFI, etc, which evaluate the publicly available financial and non-financial information of the listed companies of the stock exchange. Based on the financial and non-financial parameters of the Shari'ah screening methodology for the companies, it is assessed to be compliant or non-compliant. These methodologies are

used by fund managers to determine the Shari'ah compliance of stocks in different jurisdictions. The fund managers are not obliged to hire a Shari'ah advisor to check the Shari'ah compliant portfolio for continuous Shari'ah assessment, although some fund managers do hire the Shari'ah stocks screening organizations which are endorsed by the Shari'ah scholars to perform Shari'ah screening of the stocks for them.

SC (securities commission) Malaysia has developed in house Shari'ah stocks screening methodology and provide the list of Shari'ah compliant securities twice a year for Bursa Malaysia stocks. This is called regulator based Shari'ah stocks screening.

The regulator or agency based (DJ, S&P, etc) screening methodologies provide only the compliant status for the company that also on the financial data of last year as the current financial year data is not available. There is no further information provided such as the Shari'ah compliance level of the stocks, possible Shari'ah compliance forecast, etc.

There is currently no comprehensive Shari'ah governance tool for the Shari'ah stocks screening which can provide additional information about the compliance status and Shari'ah non-compliance risk evaluation in the Shari'ah compliant stocks.

1.2 ISLAMIC FINANCIAL SYSTEM, MARKET, AND FUNDS

The first Islamic mutual fund was established in 1968 in Malaysia, but it was only in 1990 when investment in such funds was allowed by the Islamic case law⁴. (Jonathan, 2013). There has been a significant amount of increase in the asset under management of Islamic funds since in 1996 the AuM of Islamic fund was total of USD 800 million whereas in 2007 these funds increased to 130 with the total AuM of USD 7 billion. In March 2010, these funds increased to 350 in total with the global AuM of USD 25

 $http://www.nyulawglobal.org/globalex/Researching_Islamic_Law_Malaysian_Sources.html\\$

⁴ Scope of Islamic law. Islamic law is not a legal system, but a legal tradition, much like the common or civil law traditions.

billion. Jonathan (2013). In 1999 Dow Jones introduced the DJ Islamic index which now has more than 70 indices differentiated by companies, size, and geographic potions.

Shari'ah compliant stocks are 36% of the assets of Islamic fund, followed by 35% of the money market instruments, whereas the Sukuk only constitute 7%. Seventy-one percent of the funds have AuM of less than 25 million, which means that Islamic funds do not reach the critical mass necessary for efficiency and stability. Islamic funds are expected to grow in size if they are able to attract assets such as awqaf or Shari'ah compliant portions of the pension scheme⁵. Other indices such as FTSE and Standards and poor introduced Islamic indices in 2006. There are currently five global indices including Dow Jones, Standards & poor, FTSE, MSCI, and AAOIFI, but there are few others developed by the local central banks such as Malaysia and Pakistan. (Islamic financial services stability report, IFSB, 2016)

1.3 SHARIA'AH STOCKS SCREENING PRINCIPLES AND TECHNIQUES

In this chapter, a brief outline on the nature and importance of Shari'ah screening principles and techniques are highlighted. Details of Shari'ah stocks screening are discussed in chapter 2.

Malaysia was the first Muslim country with a conventional capital market to design and implement Shari'ah stocks screening process and Shari'ah stocks index, followed by Dow Jones in 1999. Saiti (2016). The Shari'ah screening process has two steps. First, the qualitative screening in which the core business of the company is assessed and if the company is involved in activities such as the sale of alcohol, arms, and defense, pork or conventional banking products, etc. then the company is dropped from the screening process and is declared non-compliant.

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⁵ Executive summary, IFSB Islamic financial stability report 2016, Pg. 3