# The Interdependence of Stock Market among Malaysia and Selected Middle East Countries: Financial Innovation of Islamic Stock Index

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Abstract. This article is publish to review the interdependence of stock market among Malaysia and selected Middle East countries (Jordan, United Arab Emirates, Bahrain and Qatar). Throughout the year, there are many researches and studies conducted on stock market. Majority of the studies come out with the conclusion that most of the stock market around the world has linkages and interdependence. However, there still lack of study in the context of Islamic stock market interdependencies that explore the linkage between volatility of returns in selective Middle East market. Hence, in this article, the study is to focus on the level of international equity market interdependence between Malaysia and selected Middle East country. The study will conduct based on the daily data of the stock indices from January 2008 until December 2018. The results from the study will be useful for the policy maker in regulating the market especially for financial innovative, and to investors and speculators to beat the both markets.

Keywords: Islamic Stock Market · Middle East Country · Financial Stock Innovative

#### **1** Introduction

Malaysia is among of the top countries that fastening their economic growth through their successful open market activities in the South East Asia. A good diplomatic strategy and relationship with many countries around the world makes Malaysia as one of the best country to have a good platform for an investment. There are many industries that well develop in Malaysia, as a part of that, Malaysia stock market is one of the industry that playing an important role in Malaysia's financial sector which subsequently helping in boosting the sustainability of the economy. Unfortunately, a tough condition in 1997 Asian Financial crisis had brought Malaysia facing to the worst recession from devalued of Ringgit currency. According to (Azman-Saini, W.N.W. and Habibullah, M.S. and Law, Siong Hook and Dayang-Afizzah, 2007), during this tough condition, the fall of composite index of Kuala Lumpur Stock Exchange (KLSE) gives such impactful to financial sectors and this situation as a consequences leads to stock return decrease. Going through the hard situation in 1997, it shows that stock market play as an important role in boosting Malaysia's financial sector. According to (Nandha & Hammoudeh, 2007), 1997 crisis had giving a worst impact to Asia Pacific region countries and after the decades a crisis in 2008 happen again. Thus, this will be

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an attractive point to propose this study in order to know the situation of capital market especially Islamic capital market from 2008 to 2018. Throughout the year, there are many researches and studies have been conducted regarding the stock market. Majority of the studies come out with the conclusion that most of the stock market around the world has linkages and interdependence. However, there still less study in the context of Islamic stock market interdependencies that explore the linkage between volatility of returns in selective Middle East market (Bouri & Yahchouchi, 2014) Hence, in this paper, the study is to focus on the level of international equity market interdependence among Malaysia and selected Middle East country (Jordan, United Arab Emirates, Bahrain and Qatar) for Islamic capital index in a decade emphasizing during recent economic financial crisis. The interesting in study it will investigates the existence of equity Islamic market relationship among the Middle East country, i.e. Jordan, United Arab Emirates, Bahrain and Qatar to the Malaysia stock market in term of Islamic stock index during a past 10 decades from 1st January 2008 until 31st December 2018. Since these five (5) countries are Islamic countries, we expected that there will be an association and relationship between the stock market among this countries in term of Islamic capital index as shown in the proposed research framework in Figure 1. The findings is predicted to give a good platform for investors in order to expand their investment especially in the Islamic stock market over the Middle East countries and Malaysia.



Fig.1. Proposed Research Framework.

## 2 Institutional Background of the Islamic Stock Indices in Middle East and South East

MENA stock market is having a small equity market and not well developed, thus need

their countries itself to improve their development on their stock market. A research conducted on this market, however, the result showed this market is less liquidity than other world financial market. In addition, the short selling was still remains illegal (Bouri & Yahchouchi, 2014). Moreover, this market also show weak form efficiency due to poor quality information and low competition (Lagoarde-Segot & Lucey, 2008). Besides, MENA countries have different function than those developed counterparts. Their market consequently have relatively common economic, institutional, regulatory, political and cultural links which at some extent, the industrial organization found in MENA markets is also quite different from that in developed economies (Assaf, 2009) . Furthermore, the MENA capital markets also are less developed than the Asian or Latin American emerging markets (Bouri & Yahchouchi, 2014) but MENA market offer portfolio and fund managers outstanding diversification benefits (Neaime, 2012). According to Floros, (2011), little investors know about the existing of the dynamic relationships between the prices of Middle East stock markets although empirical research generally suggests that national mature stock and futures markets move together. Besides, previous research that focusing on the integration of stock markets in MENA nations with those in the rest of the world is limited. Based on (Neaime, 2002) that using the Engle-Granger (1987) co-integration approach, test for the integration of MENA markets with world stock markets over the period 1990 to 2000 shows there is a weak integration among the MENA markets (Morocco, Egypt, Jordan and Turkey), however, among developed market the result reveals there is strong integration between MENA markets and developed markets (U.S., U.K. and France). The studies of (Paskelian, Nguyen, & Jones, 2013) also find similar results as (Neaime, 2002). Besides, research that focuses on the integration of stock markets within the MENA region with each other and the rest of the world is limited.

### **3** Gap and Issue of Islamic Stock Index

Jamaani & Roca, (2015) stated that developing market experience well growth over the last few decades. Nikkinen, Omran, Sahlström, & Äijö, (2008) reports, incident of September 11 that attacks New York, USA have largest impact to the world stock market. However, Middle East and North Africa financial markets had only a minor effect towards the incident. In the Middle East countries, the market itself can be characterised as a market with low liquidity, small market and less information for the investors (Haque, Hassan, Maroney, & Sackley, 2004). Based on the research and study by Elango and Hussein (2008), there is less study conducted in the Middle East towards the market efficiency, even it has but only produce the fragmented results. Even though market at Middle East still not well develop compared to the other markets and regions, but they still offer an outstanding diversification benefits to the investors (Henry & Springborg, 2010). In this study, the main research gap is reflected with empirical studies in terms of interdependence of Islamic stock indices around the world. Previous researchers found there is still less study in the context of Islamic stock market interdependencies that explore the relationship between volatility of returns in selective Middle East market and south East Asia countries. In addition, the data used in previous study are limited to the conventional stock markets located in US and Europe, even it has study conducting on Islamic stock index but the empirical is more concentrating on

the post-economic crisis period analysis.Therefore, in this study we want to explore more the association and interdependence of selected Middle East Islamic stock index towards Kuala Lumpur FTSE Bursa Islamic stock indices focusing on global financial crisis period. For this reason, this study examine the relationship of the Middle East stock markets and whether these markets are weak-form efficient and have bad effect towards Malaysian stock market especially in Islamic stock indices during 1<sup>st</sup> January 2008 until 31<sup>st</sup> December 2018. The question is about whether is there any significant relationship between selected Middle East countries Islamic stock market to the Malaysia Islamic stock market.

### 4 Conclusion

The main objective of this study is to investigate the level of international equity market interdependence among Malaysia and selected Middle East country, i.e. Jordan, United Arab Emirates, Bahrain and Qatar in term of Islamic stock index. Based on the previous study by Miniaoui, Sayani, & Chaibi, (2015), which indicates the performance on the Islamic and conventional indices of the GCC countries. The findings shows the GCC Islamic index exhibits similar attributes of the conventional indices in all the periods of analysis in 2008. In fact, the results show that the GCC Islamic index has similar risk profile as its conventional counterparts. This support the findings of association between Islamic and conventional stock index in selected Middle East stock market and Malaysia stock market which shows the weak correlation. Research by Girard & Hassan, (2009) found that Islamic and conventional groups of FTSE are integrated. Research that used a multivariate co-integration analysis also emphasized that both types of indices have similar return to risk and diversification benefits. Moreover, Islamic indices have the same level of efficiency as conventional ones. In terms of cointegration analysis, Islamic indices of Dow Jones and S&P have no co-integrating relations with their respective benchmarks, which suggests the existence of long-run diversification opportunities (El Khamlichi, Sarkar, Arouri, & Teulon, 2014). Based on the previous study it is proven that Islamic and conventional stock indices are interdependence and have linkage to each other. Referring to the efficient market hypothesis (EMH) theory, information transmission in the international market transactions can give the impact on the stock market performance especially for those countries that is interdependent. The investor and speculator should aware of this situation as anything happen to Qatar conventional stock exchange will affect the other countries stock exchange. Besides, the new information that comes from Qatar will have a linkage towards Malaysia, Jordan and UAE stock exchange. In addition, information transmission that happen between those countries will help the speculator to predict the market movement of the equity market to gain some profit.

#### 5 Research Limitation and Recommendation

In order to keep the study comprehensive some limitations had to be made. First of all, the data used in this study are limited only to the stock market of Malaysia and selected Middle East country, i.e. Jordan, United Arab Emirates, Bahrain and Qatar in term of

Islamic and conventional stock index. Even though in the Middle East have many of Islamic countries but all of them is not equally developed. Due to this problem, the research only limit into a certain number of countries. There are also insufficient references can be used for this study since most of the related research was been done on Europe and US market. Since this dissertation is using stock indexes as tool to investigate the relationship between stock market indices, a comprehensive index has to be available. By browsing the Data stream, the study tried to find the stock markets for each country. From this research, it is found that Islamic stock indices are quite hard to find due to the stock market are still at the early stage. Based on the chosen markets and the timeframe, Islamic stock index for those country in Middle East are very limited. As consequences, the best timeframe for the data available is only for 10 years. This limitation may be criticized, however this research have found previous research by Miniaoui et al., (2015), that also studied the linkage between the selected countries which we consider to strengthen our argument.

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