Extended Abstract

Introduction

Stocks in Islamic indices are subject to some sectoral and financial constraints due to the Islamic screening techniques. Islamic indices do not include conventional financial services shares and a leverage threshold ranging from 30% to 33% is applied. For this reason, Islamic indices are less sensitive to systematic risk sources. Indeed, many researchers have concluded that Islamic indices have a lower level of systematic risk, are less sensitive to interest rates and showed relatively better performance during crisis periods than their conventional counterparts (Alam & Rajjaque, 2010, 237).

These findings raise questions such as whether Islamic indices offer diversification potential in terms of conventional investors and whether they can be used for hedging. Therefore, the aim of this study is to demonstrate whether Islamic indices offer national diversification opportunities and whether they can be used for hedging in terms of conventional investors.

Methodology

The dataset consists of Islamic and conventional indices calculated by Dow Jones and Morgan Stanley Capital International in Turkey, Malaysia, the United States of America and the United Kingdom. Augmented Dickey-Fuller and Phillips-Perron tests have been adopted from the classic unit root tests for stationarity. Employing Engle-Granger and Johansen cointegration tests, it is revealed that whether there is a cointegration relation between Islamic indices and their conventional counterparts.

According to portfolio theory, there must be different price behavior among asset classes in order for diversification opportunities to emerge. The more different the price behavior between asset classes, the greater the diversification potential is. The econometric expression of this phenomenon concerns the degree of cointegration between asset classes. That is, the lower the degree of cointegration, the higher the diversification potential (Guyot, 2011, 33).

In this study, Engle-Granger two-stage and Johansen cointegration tests are supposed to determine whether there is a long-run equilibrium relationship between Islamic indices and their conventional counterparts and whether Islamic indices offer national diversification opportunities.

The first step in both Engle-Granger and Johansen tests is to determine whether the indices contain unit root and at what level they are stationary. For this purpose, Augmented Dickey-Fuller and Phillips-Perron tests were used. Engle-Granger and Phillips-Quiliaris tests were performed in the two-stage cointegration test. These tests were applied in binary groups, with the Islamic and conventional indices considered separately as dependent variables.

In the Johansen test, lag lengths were determined according to the Akaike information criterion through VAR models established with binary groups. Then, the Johansen test were done according to the third model in order to reveal the cointegration relations.

The existence of a cointegration relationship between Islamic and conventional indices shows that there are no diversification opportunities and the opposite shows that Islamic indices have diversification potential in terms of conventional investors.

Results

According to Johansen cointegration test results, there is no long-run cointegration relationship between Islamic indices and conventional counterparts at 5% confidence level. As a matter of fact, the trace and maximum eigenvalue test statistics are below than the 5% critical values. The results of the two-stage cointegration test also show no significant cointegration relationship. According to the findings obtained in this research, the hypothesis that there is no cointegration relation between Islamic indices and conventional counterparts cannot be rejected.
In other words, Islamic indices and conventional equivalents are not affected by a similar stochastic trend. A significant portion of the conventional index components is eliminated due to Islamic screening criteria. This fact causes Islamic indices and conventional counterparts not to follow a common trend. This finding implies that Islamic indices can be used for the purpose of hedging by conventional investors.

According to empirical findings, it can be said that Islamic indices can be used by conventional investors for the purpose of diversification and hedging. However, as it is understood from previous scientific researches, it is important to keep in mind that Islamic indices have a limited potential for diversification, especially considering the high level of correlation between market indices in developed markets.

**Conclusion**

Considering the empirical findings obtained in this study, it is not possible to assert that the existence of the cointegration relation between Islamic indices and conventional counterparts, which are examined in Turkey, Malaysia, the United States of America and the United Kingdom, with the exception of Dow Jones Turkey Islamic index. These findings suggest that Islamic indices may offer some degree of national diversification opportunities in terms of conventional investors and may be used for hedging.