Is the Islamic Finance Model More Resilient than the Conventional Finance Model?
Evidence from sudden changes in the volatility of Dow Jones indexes

Amélie CHARLES‡
Audencia Nantes, School of Management

Olivier DARNÉ‡
LEMNA, University of Nantes

Adrian POP§
LEMNA, University of Nantes

---

‡We are grateful to Sheheryar Malik and participants at the Financial Econometrics Workshop, Paris, France, November 2010, for their helpful comments and suggestions. We are also grateful to Nancy Kiley and Kathy McGoldrick (Dow Jones) for help with data. The usual disclaimer applies.

†Audencia Nantes, School of Management, 8 route de la Jonelière, 44312 Nantes Cedex 3. Email: acharles@audencia.com.

‡Corresponding author: LEMNA, University of Nantes, IEMN–IAE, Chemin de la Censive du Tertre, BP 52231, 44322 Nantes, France. Email: olivier.darne@univ-nantes.fr.

§LEMNA, University of Nantes, IEMN–IAE, Chemin de la Censive du Tertre, BP 52231, 44322 Nantes, France. Email: adrian.pop@univ-nantes.fr.
Abstract

This paper addresses the question whether the Islamic indexes are more or less affected by sudden changes in volatility regimes than the “conventional” counterparts. For that purpose, we apply an iterative cumulative sum of squares (ICSS) algorithm to identify structural breaks in the volatility patterns characterizing several major Islamic and conventional indexes over a period that covers about 14 years of daily data and includes the recent large-scale financial turmoil. The results show that both Islamic and conventional indexes have been affected to the same degree by variance changes. We further test the hypothesis of equality of variance between Islamic and conventional indexes over various sub-periods defined with respect to the identified sudden changes in variance. The statistical tests confirm this hypothesis over the vast majority of sub-periods. However, when the variance is not the same across the two types of indexes, the Islamic indexes exhibit slightly higher volatilities than their “conventional” counterparts.

Keywords: Islamic finance, Volatility, Sudden changes, Islamic indexes, Conventional indexes.

JEL Classification: G01, G21, G28.