

# Advanced Risk Profile Analysis of Islamic Equity Investment : Evidence from the American, Asian and European Market

MONDHER BELLALAH\*  
ZINEB CHAYEH \*\*  
HELA MINIAOUI\*\*\*

---

## Abstract

As far as the asset and liability management is concerned, the advanced analysis of the risk and return profile of Islamic financing and investment products constitutes today one of the great challenge of Islamic financial institutions. From the fact that by design, Islamic financial institutions should be keeping a handsome portion of their assets in equity investments, this paper brings out the dynamics of specific risk profile inherent to the Islamic equity investment based on investing in Sharia compliant stock market. Therefore, we investigate three Islamic equity indexes classified by economic hubs (the Dow Jones Europe, Asia-Pacific and USA) against their conventional peers from 2003 to 2009. Drawing from the specific features of the Dow Jones Islamic indexes and its compounds inherent features, the paper argues that Sharia screening which alters the composition of Islamic indexes would contribute to the shaping of a distinguished risk profile.

---

## I. Introduction

BY DESIGN, ISLAMIC banking should be keeping a handsome portion of their assets in equity investments in order to be consistent with the fundamental principle of Islamic finance that is the Profit and loss sharing. Islamic banks are supposed to hold equity in corporations and sit on their boards of directors. Nevertheless, any investment in equity based or profit and loss sharing partnerships exposes Islamic financial institutions to equity investment risk that are not applicable to conventional financial institutions. While Islamic economic and banking has received a fair share of research and investigation, the existing academic literature on Islamic equity investments is still embryonic despite their increasing growth and

\* Professor of Finance, The University of Cergy-Pontois-THEMA, 33 bvd du port, 95 011 Cergy, FRANCE

\*\* Professor, The University of Cergy-Pontois-THEMA, 33 bvd du port, 95 011 Cergy, FRANCE

\*\*\* Associate Professor and Program Director, University of Wollongong in Dubai, Block 5, 14 & 15, Dubai Knowledge Village, PO Box 20183, Dubai, UAE

### References

- Al-Zoubi, H.A. and A.I. Maghyreh, (2007), "The Relative Risk Performance Of Islamic Finance: A New Guide To Less Risky Investments", *International Journal of Theoretical and Applied Finance*, Vol. 10, No. 2, pp. 235-249.
- Ayub, M., (2007) "*Understanding Islamic Finance*", Wiley Finance
- Bollerslev, T. (1986), "Modeling the coherence in short-run nominal exchange rates: a multivariate generalized ARCH model", *Review of Economics and Statistics*, Vol. 72, pp. 498-505.
- Campbell, R, R. Huisman and K. Koedijk, (2001), "Optimal Portfolio Selection in a Value at Risk Framework", *Journal of Banking and Finance*, Vol. 25, pp. 1789-1804.
- El-Gamal, M. A. (2006), "*Islamic Finance Law, Economics and Practice*", Cambridge University Press, Cambridge, UK
- Fama, Eugene F., (1972), "Components of Investment Performance », *Journal of Finance*, Vol. 27, No. 3, pp. 551-567.
- Favre, L and J.A. Galeano, (2002), "Mean-Modified Value-at-Risk Optimization with Hedge Funds", *Journal of Alternative Investment*, Vol. 5, No. 2, pp.2-21.
- Ferson, W., and M. Qian. (2004) "*Conditional performance evaluation*", Working Paper, Boston College.
- Ferson, W. and R. Schadt, (1996), "Measuring fund strategy and performance in changing economic conditions", *Journal of Finance*, Vol. 51, pp. 425-461.
- Ferson, W. and V. Warther, (1996), "Evaluating fund performance in a dynamic market", *Financial Analysts Journal*, Vol. 52, No. 6, pp. 20-28.
- Genency, Ramazan, Faruk Secuk and Brandon Whitcher, (2002), "*An Introduction to Wavelets and Other Filtering Methods in Finannce and Economics*", Elsevier Publication.
- Giot, P. and S. Laurent, (2003), "Value-at-risk for long and short trading positions", *Journal of Applied Econometrics*, Vol. 18, pp. 641-663.
- Giot, P. and S. Laurent, (2004), "Modeling daily value-at-risk using realized volatility and ARCH type models", *Journal of Empirical Finance*, Vol. 11, pp. 379-398
- Greg, N., (2009), "*The VaR implementation handbook*", McGraw-Hill.
- Jorion, P., (1997), "*Value-at-Risk: The New Benchmark for Controlling Market Risk*", McGraw-Hill.
- Jorion, P., (2001), "*Value at Risk*", McGraw-Hill, New York, NY.
- Kupiec, P., (1995), "Techniques for verifying the accuracy of risk measurement models", *Journal of Derivatives*, Vol. 2, pp. 173-184.
- Zangari, P., (1996), "A VaR Methodology for Portfolios that Include Options", *Risk Metrics Monitor*, First Quarter, pp.4-12.