Large Scale Analysis on Fund Characteristics and Performance Persistence for Islamic Equity Funds

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ABSTRACT

1. Motivations and outlines:

The rapid development of Islamic funds over the last two decades has been triggered by an important request by investors with high liquidity mainly in Muslim countries. Moreover, the recent financial crisis in the last decades attracted considerable attention towards an alternative Financial Model oriented towards ethically, socially and environmentally responsible investments, enabling, therefore, better prevention of crises. Nowadays investors have attached an increasing importance to the mutual funds selection, which require detailed information on the funds and their investment markets. To respond to this growing need several authors have investigated the determinants of funds performance which is a fundamental part of investors fund selection. Several characteristics of funds were analyzed as potential key factors of future performance, in particular fund's age, size, family size, fees and expenses, front-end and back-end loads, the redemption period, the turnover, the flows, the past performance, etc. Researches tried to examine whether fund performance is related to

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fund attributes and which characteristics are the most important. The importance of this kind of research is emphasized by extensive number of studies[5]. One of the recent studies is the work of Bablos, Mamatzakis, and Matousek (2015) which reveals that funds size has negative effect on US funds. This result is consistent with Ferreira, Keswani, Miguel, and Ramos (2013) for their US sample. However, Ferreira, Keswani, Miguel, and Ramos (2013) found that performance was positively affected by scale for non-US funds and the ones investing overseas. Their results also indicate that mutual-funds managed by large fund families displays superior performance. Furthermore, the authors found evidence of short-run persistence in fund performance using US sample. Agnesens (2013) used two different estimation model[6] and found conflicting results. The author concluded that the variation in previous empirical results can be attributed to methodological issues. In the context of socially responsible funds SRI, Renneboog, Horst, and Zhang (2011) address several aspects of monetary flows and the determinants of fund's performance. They suggest that the size of the fund has a negative impact on performance. This is consistent with decreasing returns to scale in fund's management according to Chen, Hong, Huang, and Kubik (2004). The management fees also have a negative impact. The results also prove that the size of the fund's families, the existence of policy of activism for the US funds, the existence of in-house SRI research team have positive impact on fund's performance. However, despite the economic growth and the popularity of the Islamic funds in several countries in the world, they remain very much within an under- researched area[7]. Studies conducted recently have

[5] Grinblatt and Titman (1994), Dahlquist, Engström, and Söderlind (2000), Chen, Hong, Huang, and Kubik (2004), Prather, Bertin, and Henker (2004), Agnesens (2013), Ferreira, Keswani, Miguel, and Ramos (2013), Renneboog, Horst, and Zhang (2011), Ben Belgacem and Hellara (2011), Babalos, Mamatzakis,and Matousek (2015)

[6] the Cross Reg approach is (a two-step multivariate regression framework) and the Generalized Calendar Time GCT-regression model proposed by Hoechle, Schmid, and Zimmermann (2012)

[7] We found only two studies studying the persistence of Islamic funds Abdelsalam, Duygun, Matallin-saez, and Tortosa-Ausina (2014) and El Khamlichi, Laaradh, Arouri, and Teulon (2014). However we don't find any study that analyzes the characteristics of Islamic funds.

mostly focused on studying the performance of Islamic funds, comparing to different benchmarks and to conventional funds. By conducting this research, we are aiming to analyze Islamic funds characteristics and determine those that specifically impact Islamic funds performance. This would be, to our best knowledge, the first study in this area.

Our study should lead us to properly answer to the following questions: Do mutual fund characteristics affect funds performance? What are the characteristics that impact the Islamic mutual funds performance? Is there persistence in the Islamic mutual funds performance?

2. Data:

The lack of empirical data has been a major limitation in previous researches dealing with the analysis of Islamic mutual funds. In fact, previous literatures lacked time series data and the adequate number of funds needed to validate the research. For our analysis of Islamic equity funds, we obtained data from EurekaHedge which is among the largest databases for Islamic mutual funds. The data covers the period from 1990 (when the first Islamic mutual fund was launched) to June 2013. It currently lists 849 active and non-active Islamic mutual funds, including 400 equity funds. Our final sample is free of survivorship bias and includes the monthly return data of 301 funds. These funds are domiciled in 29 countries which belong to five region; Europe[8], Gulf Cooperative Council (GCC)[9], North America[10], Asia-Pacific[11] and Africa[12]**.** For our analysis we employed the Dow Jones Islamic Market Index (DJIMI) as a benchmark index. We extracted from the "Datastream" database the monthly market capitalization, price, book to market ratio of the stocks included in the constituent's lists of the Dow Jones Islamic index. All the market capitalization where converted to the US dollars. The interest free rate used is the 3 month US T-Bill.

[8] Germany, Ireland, Liechtenstein, Luxembourg, United Kingdom (United Kingdom including British Virgin, Cayman and Channel Islands.), Netherlands, Guernsey, Jersey, Switzerland
[9] Bahrain, Kuwait, Qatar, Saudi Arabia, United Arab Emirates (UAE).
[10] Canada, United States.
[11] Australia, Indonesia, Malaysia, Pakistan, Singapore, India, Hong Kong, Mauritius, Turkey.
[12] Egypt, Morocco, South Africa.

3. Methodology:

The risk-adjusted performance of the equity mutual fund is measured using the Fama-French (1993) and Carhart (1997) four-factor alpha as a measure of risk-adjusted performance. For our main results, we estimate the four-factor, the market factor (MKT), the size factor (SML), the book-to-market factor (HML) and the momentum factor (MOM). In a second step, we examined the impact of funds characteristics and the performance persistence. For our regression, we applied a dynamic panel data model which allowed us to study the effect of the endogenous lagged variable.

4. Results:

The negative and significant coefficient estimate of "Persistence", reject the hypothesis that "winners' repeat" controversially it suggest that the Islamic equity mutual funds have a reversal behavior. When analyzing the others fund characteristics, we find that "Age" has no significant effect on the risk-adjusted returns of Islamic equity funds. Regarding the "Flow", the results show a negative and significant effect of the inflows on the risk adjusted returns. Money flows to past bad performers. When it comes to the funds family size, we obtain a positive and significant effect of lagged fund family size on mutual fund abnormal return. This finding suggests that large fund families impact positively the risk-adjusted returns. Islamic mutual funds belonging to large fund families can profit from economies of scale. The minimum investment size has a negative and significant effect on fund abnormal returns. This result refutes the hypothesis that this measure captures the potential for external monitoring by financial institutions where higher minimum purchases are associated with funds that have an institutional following and that minimum investment size has a positive impact on fund's performance stated by Prather, Bertin, and Henker (2004). Total load fees are found to have no significant effect on the abnormal returns while Management fees are found to have a positive and significant effect on Islamic equity mutual fund abnormal returns.

5. Contributions:

The results of our study, contribute to the exiting literature by addressing new issues. In fact, the present paper is, to our best knowledge the first research that uses dynamic-panel model to analyze the effect of fund characteristics and persistence on the performance of Islamic equity Funds. Secondly, the study has a very large scope of Data and environments as it covers most Islamic equity funds in 29 countries and over a period of 14 years. Ultimately, our results provide support to Mutual Fund Managers and investors, in terms of identifying the determinants of Islamic funds performance.

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