

## CHAPTER 6

### CONCLUSION

#### 6.1 Introduction

The objectives of this thesis were to investigate three issues relating to mutual fund families – fund family performance, fund family flows, and future performance of star fund families. Fund families have increased in importance recently, as most of the mutual funds work under their umbrella. This is because fund families have many advantages, such as liquidity, diversification, and easy movement between funds. The first objective was to examine the performance of the fund family by investigating the managers' selectivity skills and market timing ability for Islamic focused families and conventional-focused families. In addition, to examine the impact of star and poor on fund family performance. Finally, to investigate if fund families appear persistent in their performance.

The second objective of the thesis was to investigate the behaviour of fund family flows calculated by new money growth. New money growth is used to proxy investor behaviour and examined how investors made selection decisions. Then, to explore how star (poor) fund family phenomena and other fund family attributes contributed to the fund family flows. In addition, to investigate the spillover effect of star (poor) funds on the fund family. It is argued as to whether the existence of star (poor) funds contributes to the flow of funds itself or to the flow of peer funds in the same fund family. The analysis extended to compare the spillover effect of Islamic star (poor) funds and conventional star (poor) funds.

The third objective of the thesis was to investigate the future performance of star fund families. First, to examine whether the star (poor) funds in the fund family affect the future performance of these fund families as investors would expect. If the star fund family is positive and significant with the fund family flows, the implication is that investors anticipate a fund family with star funds to truly outperform in the future. Second, to investigate the star fund holding persistency, which means to examine if star fund families have the capability of preserving their star fund family status in the future. Finally, to detect the characteristics of star fund families that help to sustain the future star situation.

## **6.2 Thesis Summary**

This thesis comprised six chapters. Chapter 1 began with brief contextual information that explained the focus of the study. The chapter then highlighted the research problem and questions, then identified the objectives of the thesis. Finally, it presented a brief outline of the remainder of the thesis. Chapter 2 started by offering an overview of the history, evolution, principles, and development of Islamic finance. It served as a broad theoretical and conceptual background for the understanding of Islamic finance, in general, and IMF, in particular. This chapter then provided background about the mutual fund, fund family, and the definitions of star fund and star fund family. Finally, the chapter presented a brief background of the countries under study – Malaysia, Saudi Arabia, Indonesia, and Pakistan.

Chapter 3 offered the theoretical and empirical literature about the mutual fund industry and fund family industry, including Islamic mutual funds. The chapter began with the theoretical and empirical literature on performance starting with a discussion on the performance measurements, evaluation techniques, and the related theories. The

empirical literature about the performance was divided into three parts, first, literature about the managers' selectivity and market timing ability. Second, literature about the fund and fund family attributes and their impact on the performance. Third, literature about performance persistence. After that, the chapter focused on the literature on flows and investor behaviour. First, reviewed the flow-performance relationship at the fund level, and then the contribution of star and poor phenomena on the fund family flows. Focused on how these phenomena influence and other attributes on fund family flows and investor selection decisions. The chapter also reviewed the literature about the spillover effect to see how star and poor phenomena impact the flows of peer funds in the same fund family. Finally, the chapter reviewed the literature about future performance, started at the fund level to see whether the investors have the ability to select funds that are able to earn positive returns in the future. At the fund family level, only found one study that examined the contributions of star and poor phenomena to the future fund family performance.

Chapter 4 described the data collection procedures and research design in the analyses used to examine the fund family performance, fund family flows, and future performance of the star fund family. The first empirical methodology included three parts to assess fund family performance. It started with measuring performance in two main ways; selectivity skills and market timing ability. For this, six measures related to selectivity skills – mean raw return, mean excess return, the Treynor ratio, the Sharpe ratio, the one-factor alpha, and the Carhart four-factor model are used. Two measures related to market timing ability – Treynor-Mazuy and Henriksson-Merton models are used. In the second part, used fixed and random effect regression to examine the impact of star and poor funds on fund family performance. In the last part, used a contingency table to track the persistent performance of the fund families. The contingency table

was used to determine the frequency with which winning and losing funds maintain their rating over subsequent time periods. The persistence test refers to the status of winners and losers at a given period and their status in the subsequent period.

The second empirical methodology concerned fund family flows. Total net assets used to calculate the new money growth of fund families and used the Carhart four-factor model as a performance proxy. The star and poor fund families identified by ranking all the funds in the families according to the Carhart four-factor model. Then, followed the previous studies to identify the star and poor fund; indicated that the top 5% of funds based on the four-factor adjusted return are the star funds. The bottom 5% of funds based on the four-factor adjusted return are the poor funds. Then, defined families with at least one-star fund as a star fund family, and those with at least one poor fund as a poor fund family. Two aspects of fund family flows are considered. These were the contribution of the star and poor fund family to their flows, the impact of fund family attributes on their flows, and, second, the spillover effect of star (poor) Islamic fund and star (poor) conventional funds. Pooled and panel regression is used to run all the regressions related to this empirical part. The third and last empirical methodology investigated the future performance of star fund families in two ways. Used pooled and panel regression to run all regressions related to the last empirical part.

This thesis contributes to the literature by providing new concepts (Islamic and conventional focused families). The weighted average of all funds in the fund family according to the total net assets is calculated. Then, if the weighted average of conventional funds in the fund family is less than 33%, then consider this fund family an Islamic focused family, while if the weighted average of conventional funds in the fund family equal 33% or more, then consider this fund family a conventional focused family. The Islamic-focused family is one whose Islamic funds constitute at least 67%

of its total net assets, while the conventional-focused family is one whose Islamic funds constitute less than 67% of its total net assets. Islamic and conventional fund families were compared in three aspects: fund family performance, fund family flows, and future performance of star fund family.

Chapter 5 presented the findings on fund family performance, fund family flows, and future performance of the star fund family. In fund family performance, our results showed that the fund family managers take benefit from the advantages provided by families, and thus have good selectivity skills. The results demonstrated that the fund family provided more diversification and liquidity, and then provided more ability for the managers. The results also reported that Islamic-focused family managers outperform conventional-focused families, which indicated that Islamic fund family managers have better selectivity skills than conventional fund family managers. Both types of fund families exhibited poor market timing ability. This is consistent with the modern portfolio theory, which indicates that good diversification when forming investment portfolios reduces risk and improves performance. In addition, the results ensure that *Sharia* screening will not impose major costs on investors in Islamic investment. The results also showed that the fund families used their strategies and attributes to improve their performance. For example, the strategy of having star funds in the fund family, as this provided a good indication of the skills of the management team, in addition to the strategy of issuing new funds, which is shown in the results as there is a positive relationship between the number of funds in the fund family and their performance. The results also indicated that Islamic-focused family performance was less affected by fund family attributes than conventional-focused family performance.

This is because of the restrictions on Islamic investments.

Finally, the results documented evidence about the performance persistence, but it was short and only up to one month. Results indicated that the investors in the fund family can use past information for up to one month as a beneficial part of their investment decision-making process. The theoretical implication of the effects of persistent better performance seen in fund family one-month data is that the efficient market hypothesis in this market may be in its weak form and that the market is less effective in knowledge. Such finding does not invalidate the efficient market theory, because success consistency evidence is found for up to one month. Many investors are not well-informed, so there is relatively weaker competition among informed investors trying to compete with the surplus created by truly skilled fund managers.

In fund family flows, the results provided evidence of obvious star identity and a spillover effect in the fund families. Results indicated that the investors do perceive that the historical superior performance would promise future excess returns. In addition, the disposition effect does not exist in the fund families' market. Funds that make a profit are retained, and funds that do not are disposed of. The investors in the fund families become more sophisticated and they are not in a hurry to sell the winning funds.

This result is consistent with a representative heuristic theory where investors appear to be excessively positive about past winners' results and excessively pessimistic about past losers' results. In addition, the Prospect Hypothesis suggests that people judge gains and losses differently and that they value gains more than losses. When one is given two equivalent choices, with a possible benefit option and a potential loss option, their decision would be based on the expected benefit rather than the loss, even though both options produce identical economic results. However, results find that having an Islamic poor-performing fund does not have a similar negative spillover effect on the money flow of peer funds within the fund family. This result suggests that

Islamic investors are less responsive to poor fund performance, in line with the loyalty of Islamic investors. While conventional investors are responsive to poor fund performance. This is because, conventional investors do not standardise restrictions on their investments, and their ultimate goal is diversification and profit.

The results confirmed that the fund family attributes carry significant weight in the investment decision in fund families. This is because the investors used the top-down approach, which means that they choose the fund family first and then choose the funds from the fund family. Finally, the results provide novel evidence, in that results concluded that there is an asymmetric response in the flows of peer funds to the presence of Islamic star and poor performing funds in the fund family, while results did not find an asymmetric response in the flows of peer funds to the presence of conventional star and poor performing funds in the fund family.

In the future performance of the star fund family, the results concluded that a performance persistence exists at the fund-family level when investors select a fund from a star fund ownership fund family. Results also reported that the fund families with star fund holding have a capability to persistently hold a star fund in the future and that some fund family attributes give the fund family a greater chance of maintaining their star fund family status in the future. Evaluation of the presence and persistence of managerial performance is a critical test of the Efficient Market Hypothesis. Evidence of performance persistence would support the rejection of an efficient market in a semi-strong form. The existence of investors capable of expectation and making abnormal gains indicates that the market is not completely informationally efficient.

### **6.3 Contribution and Policy and Industry Implications**

This study contributes significantly by providing beneficial information about fund families to investors, regulators, and managers. This study focuses on three main issues related to the fund families. The significant contribution of this study is categorized into two sub-sections as follows:

#### **6.3.1 Contribution to Mutual Fund Literature**

This thesis contributes to the mutual fund literature especially the performance and flows of Islamic-focused families (IFF). The IFF definition adopted using Sharia-compliant screening practices. The most frequently applied threshold on the Sharia-compliant screening is at a level of 33%. IFF is one whose Islamic equity funds constitute at least 67% of its total net assets. In addition, the thesis also contributes to the study of the spillover effect using the new two terms; Islamic star fund (ISF) and Islamic poor fund (IPF).

Firstly, this is the first study to investigate the performance and flows of Islamic-focused families (IFF). In addition, the thesis provides new evidence about the managers' selectivity and timing ability at the fund family level, to the author's best knowledge, this is the first study about the selectivity skills and market timing ability at the fund family level. Especially provides a comparison between selectivity and timing ability of IFF and CFF, results found that the IFF outperformed CFF, which mean IFF investors were rewarded with higher risk-adjusted returns compared to CFF investors. The results encourage investors to invest in families that focus on Islamic funds. A primary purpose of Islamic Sharia is achieve fairness, trust and transparency, while emphasizing socio-economic development and financial inclusion. The Sharia literally meaning a clear path to be followed and observed promotes first the principle of profit-

loss sharing between financial institutions and entrepreneurs, thus emphasizing the spirit of cooperation in business which would help absorb the weight of loss when sharing it equitably.

Secondly, this is the first study that investigates the spillover effect of Islamic vs conventional star (poor) funds on the money flows of the fund family. Although the contribution of the presence of Islamic star funds was similar to the contribution of the presence of conventional star funds, the contribution of the presence of Islamic poor funds was opposite to the effect of the presence of conventional poor funds. Whereas, the presence of poor Islamic funds did not lead to outflows from the fund family, in contrast to the presence of conventional poor funds. This result encourages managers to launch more Islamic funds. This will open new research opportunities in the mutual fund family, especially Islamic-focused family.

### **6.3.2 Practical Contribution**

The present study provides useful information about three important issues related to the fund family for practitioners in the mutual fund industry. The results obtained will help fund family managers to design the best strategies to attract more money flows. According to the results, fund family managers are able to expect the appropriate funds to the fund family, where the Islamic investors direct their money to the families with star funds, while they do not punish poor-performing funds in the fund family. The results obtained from the future performance of the star fund family part will help managers to identify the important fund family characteristics that help the managers to maintain their star status. According to the results, past returns and the number of funds in the fund family are the important characteristics that will help the fund family to maintain its star status.

The results show the fund family performance and characteristics information are important for investors to help them make fund investment decision making. The findings of performance persistence found short-term persistence for up to one month. That will help investors, which means that investors can use past information for up to one month as a beneficial part of their investment decision-making process. In addition, the results of persistence in Malaysia were attractive, the results found short-term persistence for up to six months in Malaysia. That gives more confidence to investors, especially international investors.

The results obtained from the fund family flow part will help the investors choose better families from which to pick the funds. As most investors follow a top-down approach, they choose fund families first and then select individual funds from these families. According to the presented results, the presence of star funds in families is an indication of the skill of the management team and thus provides better performance, which facilitates the decision-making process for investors.

The results obtained from the spillover effect part will help investors also. Most of the investors prefer to move between funds of the same fund family rather than move between families of funds in order to save search costs and fees. Therefore, investors are interested in knowing that there is a spillover effect between star funds and other funds in the fund family. The results showed the presence of a spillover effect in families, which gives investors greater comfort in moving between funds in the same fund family instead of the more expensive option; moving between families.

Finally, the results provide an indicator that regulators (security exchange or self-regulatory organization) should encourage fund management companies to make family ranking information available in addition to mutual fund ranking. This will reduce the

time and research cost, and then this makes investors more confident in the decision-making process.

#### **6.4 Limitations and Directions for Future Research**

There are some limitations to this thesis. First, the scope of the thesis was limited to four Islamic countries from the Middle East and Southeast Asia (Saudi Arabia, Malaysia, Indonesia, and Pakistan). So, this study provides indicative but not conclusive results. So, the recommendation for future research is research should extend the research to other Islamic countries. Especially countries that contain a high number of Islamic funds.

Second, the scope of the thesis was limited to equity funds, and exclude other types. The equity funds category is the highest in terms of percentage compared to other categories. So, the recommendation for future research is research may use other types of funds such as balanced funds and the money market.

Third, the scope of the thesis was limited to the net family flows. In the countries under study, the implied flows were employed (net fund family flows). So, the recommendation for future research is research may use actual flows depending on data availability.

Forth, the thesis only focuses on the contribution fund family characteristic to the fund family performance. So, the recommendation for future research is research may consider including governance and ownership structure influence on the fund family performance.